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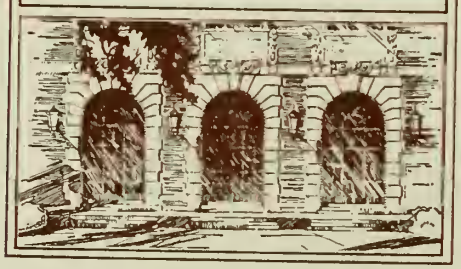

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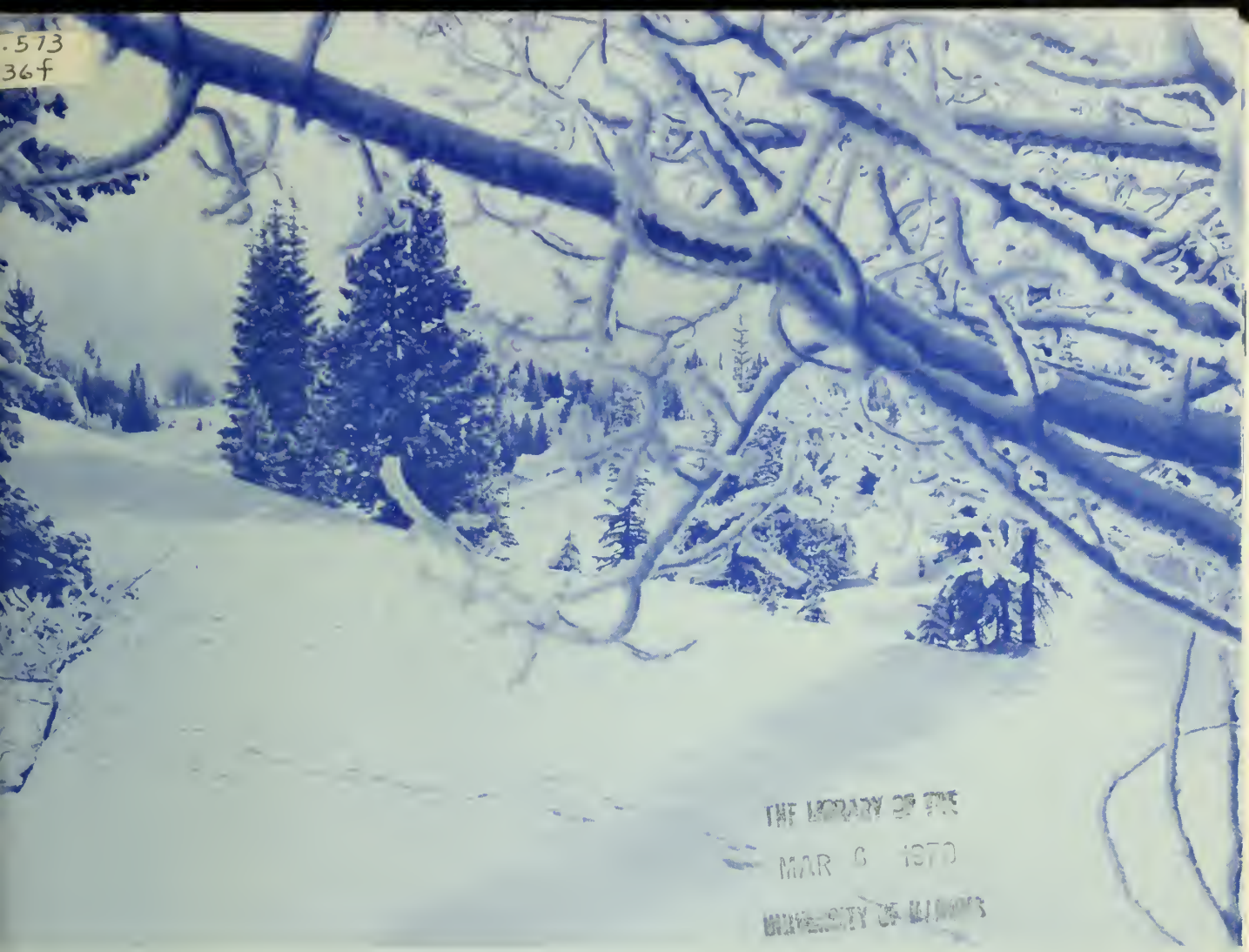

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
FEB. 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Solt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

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EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1970

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

SNOW COURSES	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1953-67 Average	Jan. 1 Last Year	Feb. 1 1953-67 Average
Berthoud Summit	12/28	51	13.4	7.2	5.3	10.8
Columbine Lodge	12/31	44	10.7	7.2	9.5	15.6
Fremont Pass	12/28	48	10.6	5.8	4.9	9.5
Mesa Lakes	12/31	35	8.5	6.5	5.9	10.3
Porphyry Creek	12/30	45	11.8	6.9	5.1	10.1
Red Mountain	12/30	54	15.2	11.4	11.5	17.0
Spud Mountain	12/30	35	9.5	9.7	8.8	15.0
Tennessee Pass	12/29	34	7.6	3.7	3.5	6.2
Two Mile	12/30	39	10.5	5.9	5.0	7.9
University Camp	12/30	43	11.1	7.1	4.6	10.9
Upper San Juan	12/30	39	10.5	13.6	14.0	19.4
Vail Pass	12/30	43	10.2	5.6	5.2	10.0
Wolf Creek Pass	12/30	44	12.0	13.1	11.7	17.8
Wolf Creek Summit	12/30	48	14.3	13.8	10.8	17.7

Some snow courses have records of less than 15 years.

The winter snows started early and have continued over most of Colorado.

The only area of the State that isn't above normal as of January 1st, is the Wolf Creek Pass area. The snow in that area is nearly normal.

The snow pack is also somewhat spotty. Some areas are almost 200% of normal while adjacent drainages are only 150% of normal.

Soil moisture is generally good due to early winter snows melting.

Carry-over storage in the reservoirs is good.

These early season snow surveys are only indications, but from this data it looks like a good snow year.

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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STATE OF COLORADO

Report prepared by

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COLORADO STATE UNIVERSITY
FT. COLLINS, COLORADO 80521

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

February 1, 1970

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

February 1, 1970

THE NORTHERN HALF OF COLORADO HAS AN EXCELLENT SNOW PACK. RESERVOIR STORAGE IS GOOD AND SOIL MOISTURE CONDITIONS ARE GOOD. GOOD WATER SUPPLIES ARE IN PROSPECT.

THE MIDDLE PORTION OF COLORADO IS NEAR NORMAL IN ALL CATEGORIES. SNOW IN THE SOUTHERN PORTION OF COLORADO AND NORTHERN NEW MEXICO IS DEFICIENT. CARRY-OVER STORAGE IS SLIGHTLY BETTER THAN NORMAL. VALLEY SOILS ARE REPORTED TO BE IN GOOD SHAPE.

MUCH ADDITIONAL SNOW IS NEEDED IN THIS AREA.

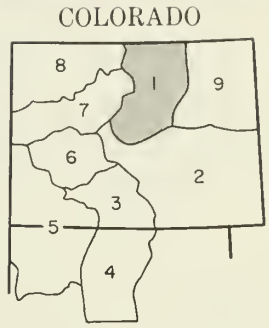
COLORADO -- THE SNOW PACK IN COLORADO VARIES WIDELY. THE NORTHERN PORTION OF THE STATE HAS AN EXCELLENT SNOW PACK. IT STARTED EARLY AND IS NOW THE MAXIMUM OF RECORD IN SOME PLACES. THE MIDDLE OF THE STATE HAS NEAR NORMAL TO SLIGHTLY ABOVE SNOWFALL, WHILE THE SOUTHERN PORTION IS MUCH BELOW NORMAL. SOIL MOISTURE IS NORMAL OR ABOVE OVER THE STATE. VALLEY SOILS ARE IN GOOD CONDITION IN MOST OF THE IRRIGATED AREAS. RESERVOIR STORAGE IS GOOD OVER THE ENTIRE STATE.

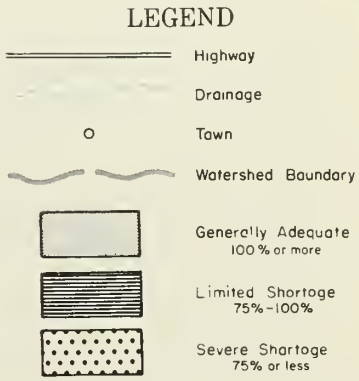
NEW MEXICO -- THE SNOW PACK IS VERY POOR OVER ALL OF NORTHERN NEW MEXICO. MANY SNOW COURSES ARE APPROACHING A MINIMUM OF RECORD. SOME OF THE EARLY SNOW HAS MELTED OR BEEN EVAPORATED BY THE WIND. RESERVOIR STORAGE IS NEAR NORMAL ON THE RIO GRANDE BASIN, EXCEPT ELEPHANT BUTTE WHICH IS 150%. THE PECOS DRAINAGE HAS NEAR NORMAL STORAGE WHIL CONCHAS RESERVOIR ON THE CANADIAN CONTAINS 140% OF NORMAL SUPPLIES. MOUNTAIN SOILS ARE IN GOOD SHAPE ON THE PECOS AND RIO GRAND DRAINAGE. SOILS ARE DRY ON CHAMA AND RED RIVER DRAINAGE. MUCH SNOW IS NEEDED TO INSURE ADEQUATE WATER SUPPLIES THIS SUMMER.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





YOUR WATER SUPPLY

IF THE CURRENT SNOW TREND CONTINUES, WATER SUPPLIES SHOULD BE EXCELLENT. THE SNOW PACK IS EXTREMELY GOOD. SOME OF THE SNOW COURSES SHOW MORE SNOW THAN ANY OTHER TIME ON RECORD.

RESERVOIR STORAGE IS 138% OF NORMAL. THIS WILL SUPPLY MUCH NEEDED SUPPLEMENTAL WATER IF NEEDED.

SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN GOOD CONDITION.

This report prepared by
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DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

(1) Observed flow minus by-pass to power plants.
(2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(3) Observed flow minus diversion through August P. Gumlick Tunnel.
(4) Observed flow minus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Good	Good
Coal Creek	Good	Good
Deer Creek	Good	Good
North Fork of So. Platte	Good	Good
North Fork of Cache La Poudre	Good	Good
Ralston Creek	Good	Good
Rock Creek	Good	Good

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	160	168
Boulder	3	177	156
Cache La Poudre	7	139	175
Clear Creek	6	153	166
Saint Vrain	3	154	149
South Platte	3	172	169

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	136	124
Boulder	1	87	92
Cache La Poudre	2	173	148
Clear Creek	2	128	110
Saint Vrain	2	119	119
South Platte	2	107	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	16.0	10.6
Barr Lake	32.2	25.9	18.4	17.6
Black Hollow	8.0	4.0	3.7	3.3
Boyd Lake	44.0	30.0	38.3	27.6
Cache La Poudre	9.5	8.4	3.9	6.6
Carter Lake	108.9	81.2	79.5	61.9
Chambers Lake	8.8	2.5	2.3	2.3
Cheesman	79.0	79.1	39.8	45.6
Cobb Lake	34.3	17.9	14.9	9.9
Eleven Mile	97.8	96.4	95.0	72.0
Fossil Creek	11.6	10.0	5.2	5.4
Gross	43.1	36.8	34.1	24.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6.4	4.8	3.6	3.1
Horsetooth	143.5	82.0	90.2	81.2
Lake Loveland	14.3	11.8	5.0	7.9
Lone Tree	9.2	8.5	1.8	6.0
Mariano	5.4	5.1	4.8	3.7
Marshall	10.3	7.0	1.8	2.1
Marston	18.0	15.9	14.7	14.1
Milton	24.4	13.1	14.2	9.0
Standley	18.5	28.6	18.1	7.9
Terry Lake	8.2	0.0	4.5	4.6
Union	12.7	11.8	3.3	7.8
Windsor	18.6	12.9	9.2	7.6

+ 1933-1967 Period.

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FORT COLLINS, COLORADO 80521

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IN THE UPPER ARKANSAS IS 145% OF THE 1953-67 AVERAGE. THE CUCHARAS AND PURGATORIE SNOW PACK IS 81%. THE RESERVOIR STORAGE IS NOW 161% OF AVERAGE AND 370% OF LAST YEAR. SOIL MOISTURE IN THE MOUNTAIN AND IRRIGATED SOILS IS ABOVE AVERAGE. NORMAL SNOWFALL THROUGHOUT THE REMAINDER OF THE SEASON IS NEEDED TO ASSURE ADEQUATE WATER SUPPLIES THIS SUMMER.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

(1) Observed flow plus change in Clear Creek, Twin Lakes, and Turquoise Reservoirs minus diversions through Busk-Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Poor
Fountain Creek	Good	Good
Grape Creek	Good	Good
Hardscrabble Creek	Good	Good
Huerfano	Good	Avg.
Monument Creek	Good	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	7	125	145
Cucharas and Purgatorie	1	104	81

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	135	104
Cucharas and Purgatorie	1	82	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe Creek	61.6	17.3	0.0	11.5
Clear Creek	11.4	10.2	7.8	6.6
Cucharas	40.0	0.2	0.7	6.9
Great Plains	150.0	98.2	6.3	26.9
Horse Creek	26.9	9.5	0.0	4.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	39.9	11.8	81.5
Meredith	41.9	25.3	0.0	5.7
Model	15.0	1.2	1.5	2.6
Turquoise	130.0	42.4	22.1	6.9
Twin Lakes	57.9	34.8	25.0	19.7

+ 1953-1967 period.

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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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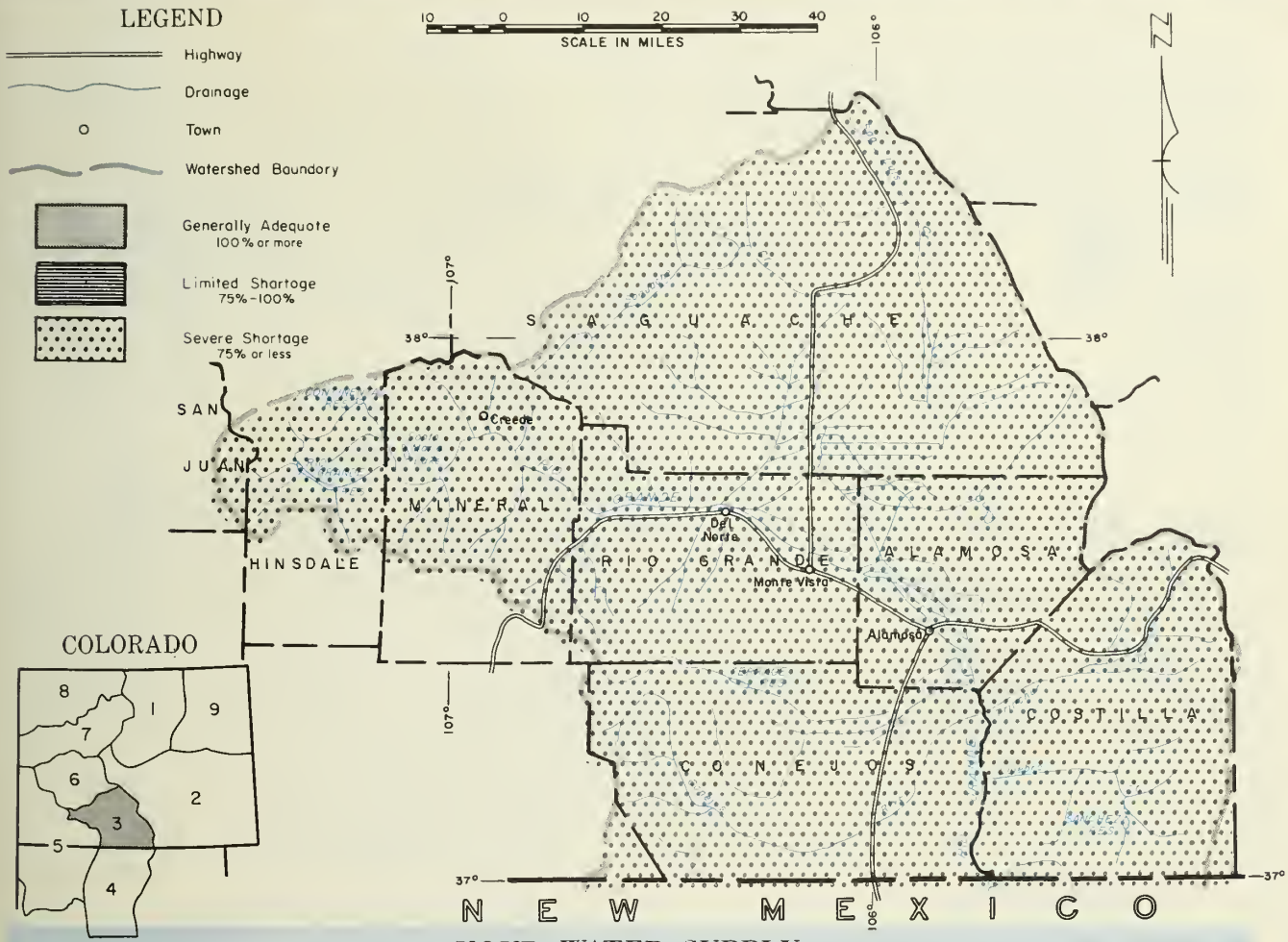
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

CONSIDERABLY MORE SNOW IS NEEDED ON THE RIO GRANDE DRAINAGE. CURRENT SNOW PACK IS LESS THAN 75% OF NORMAL. THIS COULD RESULT IN POOR WATER SUPPLIES THIS SUMMER UNLESS THE NEXT FEW MONTHS PRODUCE GOOD SNOWFALL.

CARRY-OVER RESERVOIR STORAGE IS GOOD AND WILL HELP SOME IF WATER SUPPLIES ARE POOR.

SOIL MOISTURE IS ALSO GOOD AND WILL TEND TO INCREASE RUNOFF. THERE IS STILL TIME TO INCREASE SNOW PACK.

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Issued by
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DENVER, COLORADO DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

(1) Observed flow plus change in storage in Platoro Reservoir.
(2) Observed flow plus change in storage in Sanchez Reservoir.
(3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Creek	Poor	Poor
Trinchera Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	44	59
Conejos	2	45	60
Culebra	2	108	77
Rio Grande	10	71	73

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	150	131
Conejos	1	151	129
Culebra	2	86	109
Rio Grande	3	112	124

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	5.5	4.7	3.8
Platoro	60.0	3.0	3.0	7.1
Rio Grande	45.8	26.7	20.2	10.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	18.9	11.7	10.6
Santa Maria	45.0	5.9	3.5	5.3
Terrace	17.7	11.7	11.3	3.5

+ 1953-1967 period.

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SNOW SURVEY
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FORT COLLINS, COLORADO 80521

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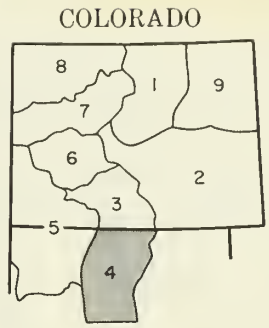
FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN
RIO GRANDE WATERSHED IN NEW MI

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

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SCALE IN MILES

YOUR WATER SUPPLY

CONSIDERABLY MORE SNOW IS NEEDED IN NEW MEXICO TO INSURE ADEQUATE WATER SUPPLIES THIS SUMMER. CURRENT SNOW PACK, OVER ALL OF NORTHERN NEW MEXICO IS ONLY ONE-HALF NORMAL OR LESS. SOME OF THE EARLY SNOW HAS MELTED. CARRY-OVER STORAGE IS ABOUT THE SAME AS LAST YEAR OR ABOUT NORMAL IN THE SMALL RESERVOIRS. ELEPHANT BUTTE CONTAINS ABOUT 150% OF NORMAL. VALLEY SOIL MOISTURE IS GOOD.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District.
(1) Observed flow plus change in Costilla Reservoir.
(2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	27	23
Rio Chama	3	29	53
Rio Grande, N.M.	12	49	54
Rio Hondo	1	81	--
Red River	2	95	51

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	118	100
Rio Chama	2	58	84
Rio Grande	5	156	126
Red River	1	111	91

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	77	67	73
Caballo	344	44	47	47
Conchas	273	230	121	163

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Elephant Butte	2195	564	382	374
Elvado	195	1	1	4
McMillan-Avalon	38	38	7	19

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER SHEDS IN COLORADO AND NEW MEXICO

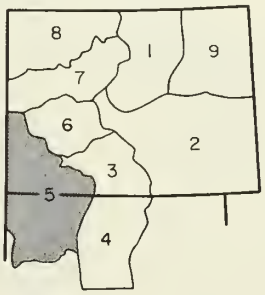
February 1, 1970 as of

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW PACK IN THE DOLORES BASIN IS 116% OF THE 1953-67 AVERAGE. HOWEVER, THE ANIMAS AND SAN JUAN BASINS ARE BELOW AVERAGE WITH 92% AND 65% OF AVERAGE SNOW PACK, RESPECTIVELY. RESERVOIR STORAGE IN THE SMALL RESERVOIRS IS 175% OF AVERAGE. THE NAVAJO RESERVOIR CONTAINS 1,035,000 ACRE-FEET WHICH IS 107% OF LAST YEAR. SOIL MOISTURE IS NEAR AVERAGE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Poor
Mancos	Avg.	Poor
San Miguel	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	62	92
Dolores	4	74	116
San Juan	5	47	65

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	155	89
Dolores	3	121	92
San Juan	2	143	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	13	13	7
Lemon	40	30	21	14
Navajo	1696	1035	965	283
Vallecito	126	74	67	46

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IN THE GUNNISON BASIN IS ABOVE NORMAL, HOWEVER, NOT AS GOOD AS LAST YEAR. SNOW ON THE UNCOMPAHGRE IS 133% OF NORMAL. SOIL MOISTURE IN THE MOUNTAINS IS NEAR NORMAL. VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION. CARRY-OVER STORAGE IN TAYLOR RESERVOIR IS 95,000 ACRE FEET WHICH IS ABOUT 175% OF NORMAL.

IF SUBSEQUENT MONTHS SNOWFALL IS AT LEAST NORMAL, WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER.

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GRAND JUNCTION, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average,+
No numerical forecasts until March 1, 1970			

(1) Observed flow plus change in storage in Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Good	Good
Taylor	Good	Good

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	10	93	123
Surface Creek	3	72	111
Uncompahgre	3	97	133

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	105	116
Surface Creek	1	109	100
Uncompahgre	1	109	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	829.6	606.1	442.4	- -
Morrow Point	121.1	39.5	106.2	- -
Taylor	106.2	95.0	37.6	53.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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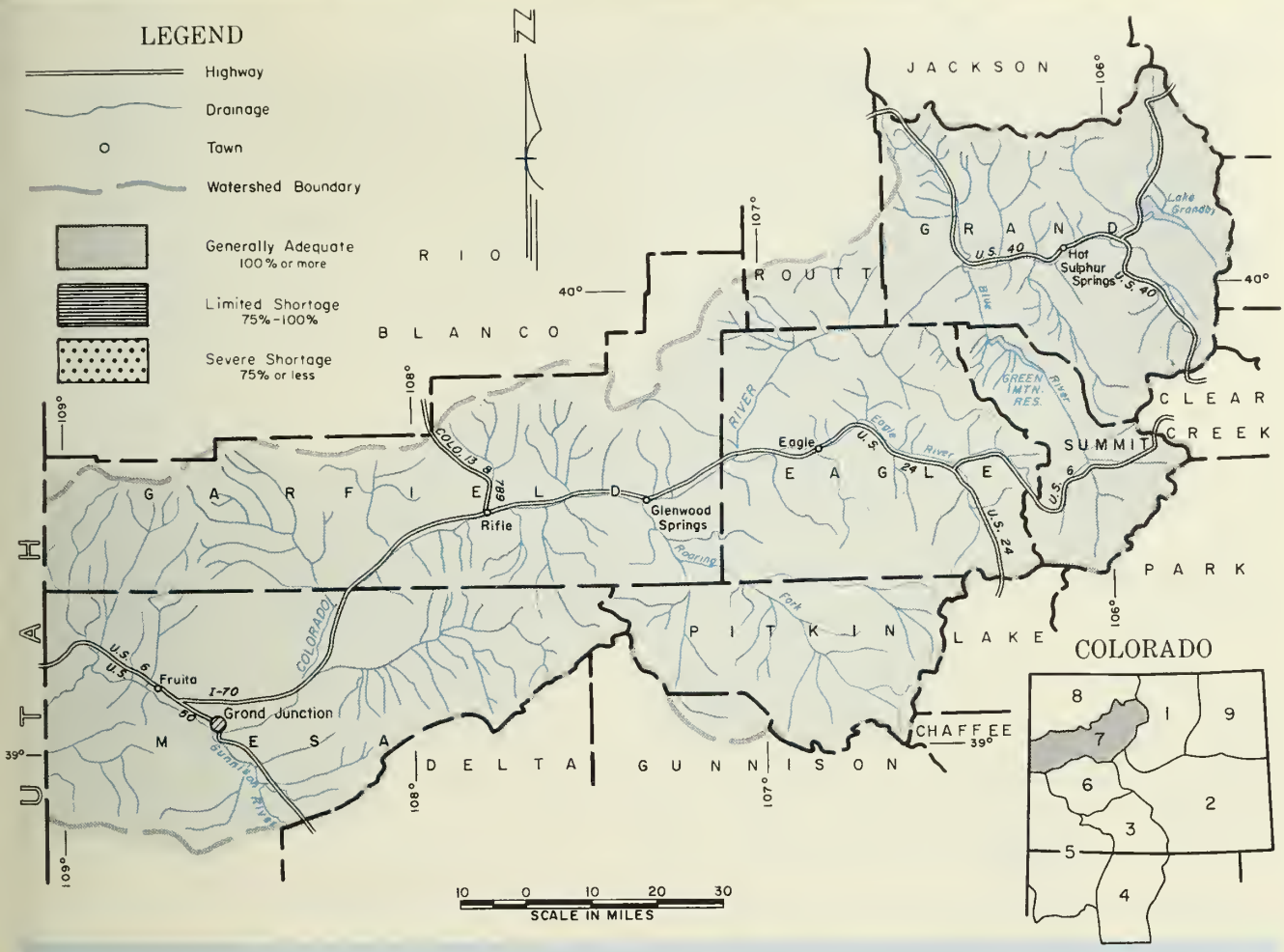
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

CURRENT SNOW PACK IN THE COLORADO RIVER BASIN IS MUCH ABOVE THE 1953-67 AVERAGE. THE MAINSTEM OF THE COLORADO IS 152% WHILE THE BLUE RIVER IS 171% AND THE WILLIAMS FORK IS 159%. THE ROARING FORK IS 128% AND PLATEAU CREEK IS 101%. MOISTURE IN THE MOUNTAIN AND IRRIGATED SOILS IS ABOVE AVERAGE. THE RESERVOIR STORAGE IS 135% OF THE AVERAGE AND 125% OF LAST YEAR. ADEQUATE SUMMER WATER SUPPLIES WILL BE ASSURED WITH NORMAL SNOWFALL THROUGHOUT THE REMAINDER OF THE SEASON.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush Creek	Good	Good
Eagle River	Good	Good
Gypsum Creek	Good	Good

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir.
(2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch.
(3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs.
(4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir.
(5) Observed flow plus diversions through August P. Gumlick Tunnel.
(6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	7	135	171
Colorado	18	118	152
Plateau	3	66	101
Roaring Fork	7	98	128
Williams Fork	3	117	159
Willow	2	114	146

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	115	111
Colorado	4	118	111
Roaring Fork	1	127	125
Willow	1	112	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254.0	238.8	240.1	130.9
Granby	465.5	285.1	166.1	253.6
Green Mountain	146.9	87.4	86.3	72.5
Homestake	43.0	20.0	21.4	- -

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101.0	75.3	47.8	- -
Williams Fork	96.8	51.0	36.9	32.5
Willow Creek	9.0	6.7	6.6	- -
Vega	32.1	13.3	10.0	10.5

+ 1953-1967 period.

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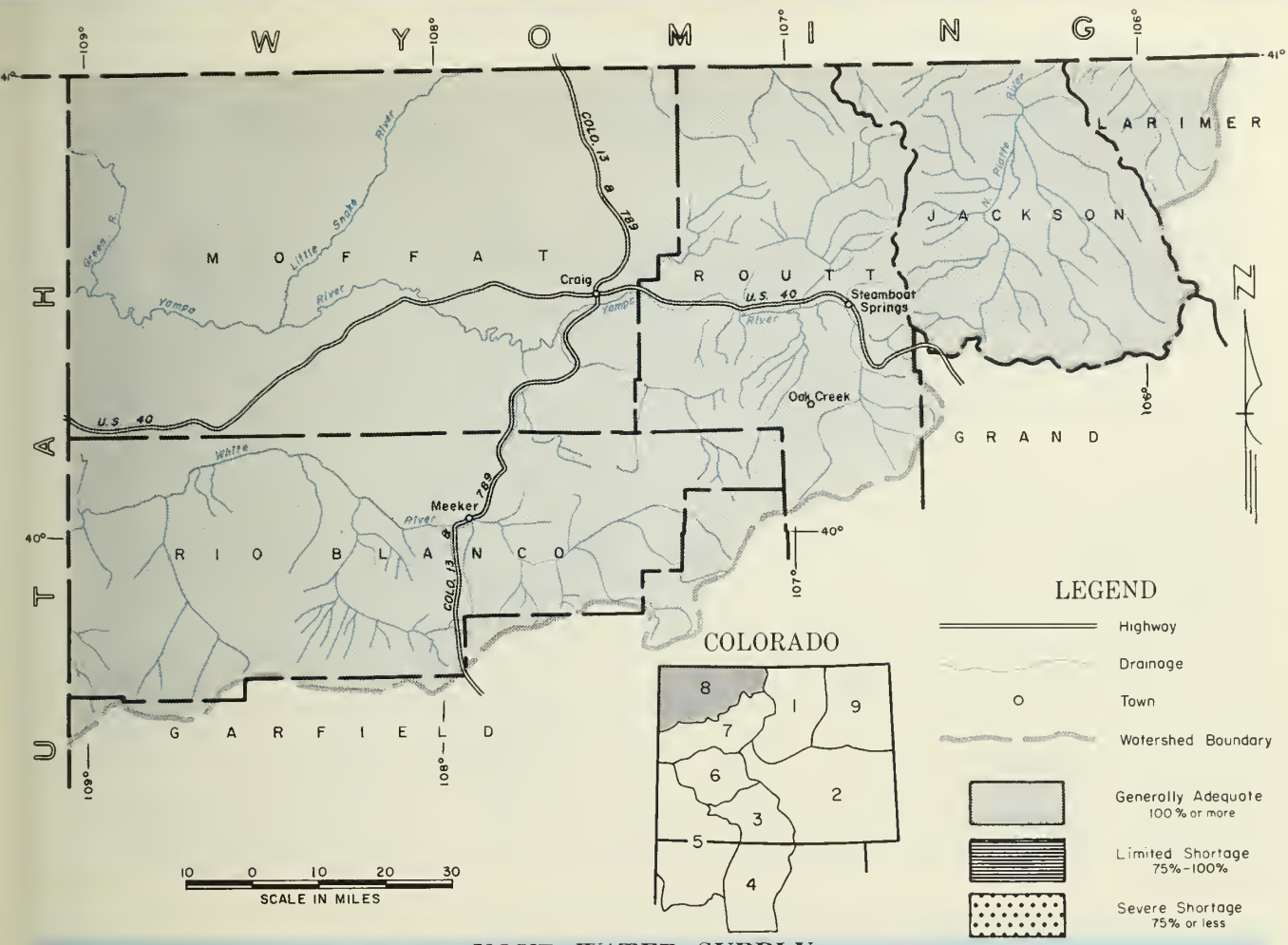
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW PACK IS EXCELLENT IN THESE BASINS. ELK RIVER IS THE LOWEST WITH 101% OF THE 1953-67 AVERAGE. THE LARAMIE AND NORTH PLATTE ARE HIGH WITH 162% AND 154% WHILE THE WHITE AND YAMPA ARE 128% AND 133%. SOIL MOISTURE IS HIGH EXCEPT ON THE YAMPA, WHICH IS BELOW NORMAL. WITH NORMAL SNOWFALL THROUGHOUT THE REMAINDER OF THE YEAR, SUMMER WATER SUPPLIES SHOULD BE ADEQUATE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Good	Good
Hunt Creek	Good	Good
Illinois River	Good	Good
Michigan River	Good	Good
Oak Creek	Good	Good
Trout Creek	Good	Good

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	2	76	101
Laramie	2	147	162
North Platte	5	108	154
White	2	92	128
Yampa	5	100	133

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	173	148
North Platte	2	117	105
Yampa	1	70	52

+ 1953-1967 period.

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FORT COLLINS, COLORADO 80521

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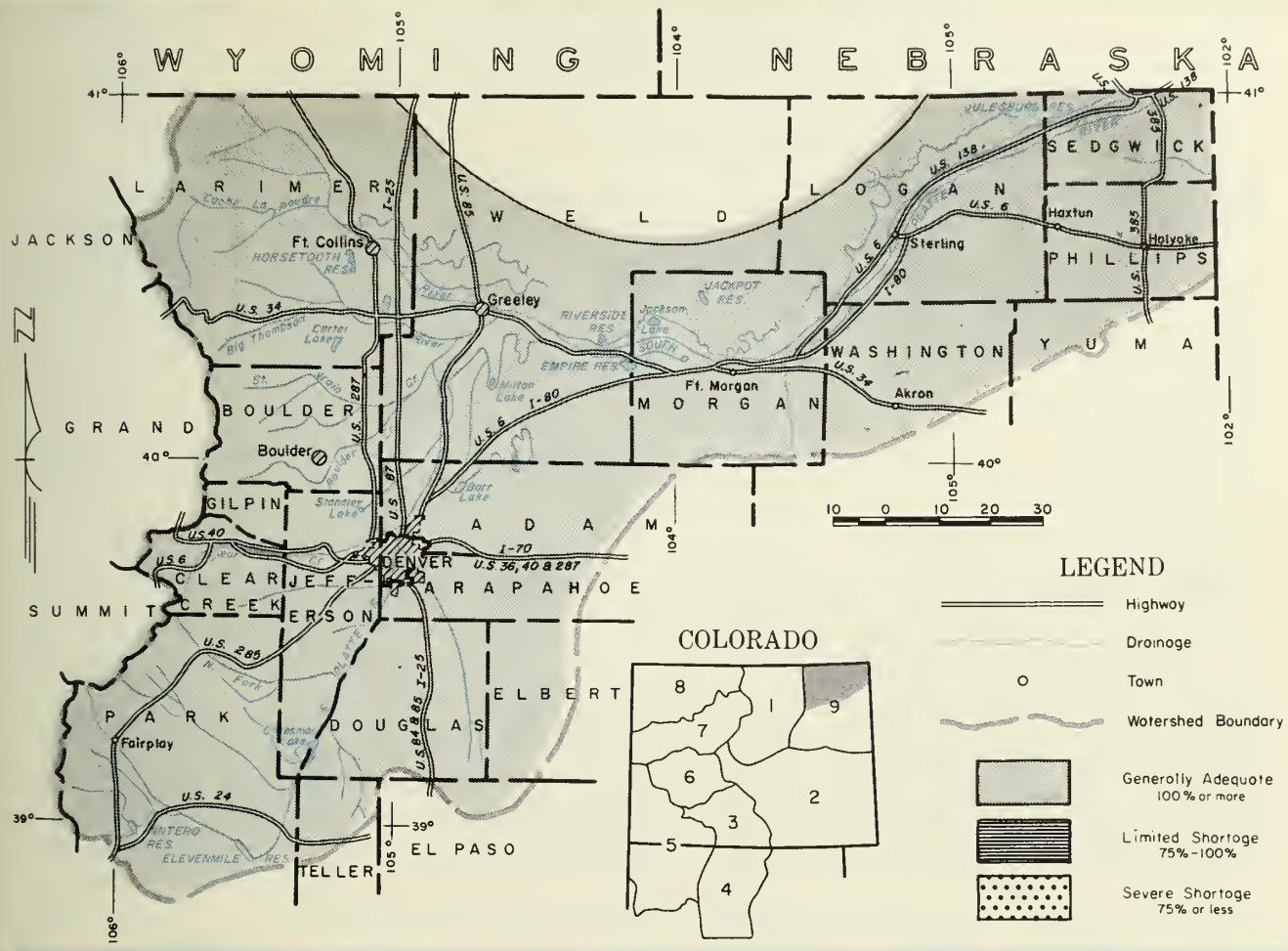
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

OUTLOOK FOR SUMMER WATER SUPPLIES ARE MOST OPTIMISTIC. THE CURRENT SNOW PACK IS MUCH ABOVE NORMAL DESPITE THE RATHER POOR SNOWFALL DURING JANUARY. SNOW PACK IS ABOUT 170% OF NORMAL OVER MOST OF THE BASIN.

SOIL MOISTURE IN THE HIGH COUNTRY IS EXCELLENT AND THE VALLEY STATIONS ARE REPORTING GOOD SOIL MOISTURE CONDITIONS.

CARRY-OVER STORAGE IN THE BASINS MANY RESERVOIRS IS ABOUT 130% OF NORMAL. THIS IS AN EXCELLENT SUPPLEMENTAL SUPPLY.

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DENVER, COLORADO
STERLING, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Last Years Flow	Average +
No numerical forecasts issued until March 1, 1970			

(1) Observed flow plus by-pass to power plants.
(2) Observed flow minus diversions through August P. Gumlick Tunnel.
(3) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Good	Good
South Platte from Ft. Morgan to Sterling	Good	Good
South Platte below Sterling	Good	Good

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	160	168
Boulder	3	177	156
Cache La Poudre	7	139	175
Clear Creek	6	153	166
Saint Vrain	3	154	149
South Platte	3	172	169

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	136	124
Boulder	1	87	92
Cache La Poudre	2	173	148
Clear Creek	2	128	110
Saint Vrain	2	119	119
South Platte	2	107	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	81.2	79.5	61.9
Cheesman	79.0	79.1	39.8	45.6
Eleven Mile	97.8	96.4	95.0	72.0
Empire	37.7	29.6	26.0	22.3
Horsetooth	143.5	82.0	90.2	81.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	29.2	27.4	27.4
Julesburg	28.2	20.1	20.5	20.0
Point of Rocks	70.0	66.4	50.6	43.2
Prewitt	32.8	19.8	9.0	11.4
Riverside	57.5	55.7	27.2	38.7

+ 1953–1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1970

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches): Last Year	Past Record: Water Content (Inches): Avg. 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/30	54	15.5	10.5	8.7
McIntyre	NS			- -	- -
Roach	1/26	42	14.5	9.9	9.8
North Platte River					
Cameron Pass	1/28	79	23.2	20.3	12.9
Columbine Lodge	1/28	73	18.1	17.9	13.6
Northgate	1/28	22	5.3	5.3	3.6
Park View	1/26	32	8.3	7.4	5.2
Willow Cr. Pass(B)	1/26	38	10.3	9.4	7.1
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/29	31	6.4	4.0	5.2
Boulder Falls	1/30	43	11.8	7.1	6.6
University Camp	1/30	56	17.2	8.9	10.9
Big Thompson River					
Deer Ridge	1/30	27	7.0	2.4	2.6
Hidden Valley	1/30	42	11.8	6.6	5.9
Lake Irene (B)	1/27	63	17.2	13.2	13.0
Long's Peak	1/31	37	10.9	5.4	5.6
Two Mile	1/30	42	11.8	9.1	7.9
Cache La Poudre					
Bennett Creek	1/31	32	8.3	3.9	- -
Big South	2/1	11	2.2	0.8	1.6
Cameron Pass	1/28	79	23.2	20.3	12.9
Chambers Lake	2/1	39	11.0	6.2	5.2
Deadman Hill	1/30	54	15.5	10.5	8.7
Hour Glass Lake	NS			- -	3.1
Joe Wright	1/28	76	21.1	15.8	- -
Lost Lake	2/1	47	12.2	7.5	7.2
Pine Creek	1/29	6	1.3	0.8	1.2
Red Feather	1/29	24	5.7	5.0	3.8
Clear Creek					
Baltimore (B)	1/29	31	6.4	4.0	5.2
Berthoud Falls	1/29	54	12.6	8.2	8.0
Empire	1/29	33	8.6	3.4	4.3
Grizzly Peak (B)	1/29	68	17.5	12.0	9.8
Loveland Lift	1/29	68	18.3	14.2	12.9
Loveland Pass	1/29	62	17.4	11.0	8.5
Saint Vrain River					
Copeland Lake	1/29	18	4.1	3.0	2.6
Ward	1/28	26	6.0	3.5	3.4
Wild Basin	1/28	40	9.1	- -	6.9
South Platte River					
Como	1/27	34	8.4	4.5	- -
Geneva Park	1/28	26	5.9	2.6	2.7
Horseshoe Mt.	1/26	42	9.6	6.7	- -
Hoosier Pass	1/28	53	12.9	7.2	7.6
Jefferson Creek	1/27	36	8.3	6.0	5.7
Mosquito	1/27	43	11.7	6.7	- -
Trout Creek Pass	1/26	20	4.7	3.6	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/29	25	6.3	- -	- -
Cooper Hill (B)	1/30	47	10.6	7.6	- -
East Fork	1/28	41	10.0	7.2	5.6
Four Mile Park	1/30	28	5.7	4.4	3.5
Fremont Pass	1/28	59	14.6	10.5	9.5
Garfield	1/30	36	9.9	9.2	8.4
Hermit Lake	1/29	21	5.1	- -	- -
Monarch Pass	1/30	47	14.0	12.3	10.3
Tennessee Pass	1/30	42	9.9	7.7	6.2
Twin Lakes Tunnel	1/24	31	7.6	6.2	6.0
Westcliffe	1/29	22	5.4	4.8	- -
Cucharas River					
Blue Lakes	1/28	0	0.0	- -	2.3
Cucharas Pass	1/28	15	3.2	3.3	- -
LaVeta Pass (B)	1/28	16	5.0	4.8	6.2
Purgatorie River					
Bourbon	1/29	17	4.1	3.0	- -
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/28	7	1.2	5.8	3.9
Summitville (A)	1/29	42	8.0	15.2	11.6
Conejos River					
Cumbres (A)	1/29	28	6.7	21.2	13.2
Platoro (A)	1/29	31	8.9	13.3	12.9
River Springs	NS			5.4	4.8
Culebra River					
Brown Cabin	1/30	12	4.5	4.2	- -
Cottonwood (B)	1/30	9	3.2	3.8	- -
Culebra	1/29	20	4.1	3.6	5.7
LaVeta Pass (B)	1/28	16	5.0	4.8	6.2
Trinchera (B)	1/29	22	5.8	5.8	- -
Rio Grande					
Cochetopa Pass	1/28	32	6.7	2.5	3.4
Grayback	NS			- -	- -
Hiway	1/29	39	11.7	18.8	15.7
Lake Humphrey	1/27	14	3.3	3.8	5.6
Love Lake (A)	1/29	21	5.2	2.8	- -
Pass Creek	1/29	13	3.7	8.8	8.9
Pool Table	1/27	17	3.7	2.4	6.1
Porcupine	1/30	29	7.0	5.7	8.2
Santa Maria	1/29	7	1.8	3.3	3.4
Upper Rio Grande	1/26	14	2.6	5.7	5.4
Wolf Creek Pass	1/29	42	11.8	23.1	17.8
Wolf Cr. Sum. (B)	1/29	42	15.0	21.3	17.7
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	1/27	2	0.6	2.2	2.6
Rio Chama					
Bateman	1/29	23	6.4	- -	7.0
Capulin Peak	1/28	12	2.8	4.8	3.3
Chama Divide	1/28	0	0.0	5.2	3.3
Chamita	1/28	14	3.4	11.1	5.0
Rio Grande					
Aspen Grove	NS			- -	3.5
Big Tesuque	1/28	8	2.2	3.8	3.7
Bluebird Mesa	1/28	8	2.0	4.6	3.8
Cordova (A)	1/29	18	4.3	10.0	6.3
Elk Cabin	1/30	4	0.8	2.0	2.9
Fenton Hill	1/27	4	1.2	5.5	3.0
Pajarito Peak	1/28	3	0.9	0.6	1.3
Payrole (A)	1/29	13	2.9	9.8	5.9
Quemazon	1/29	20	4.2	5.8	6.5
Rio En Medio	1/28	16	3.8	2.6	6.1
Sandoval	1/29	6	1.2	3.0	3.7
Taos Canyon	1/28	7	1.4	4.1	3.4
Tres Ritos	1/27	9	2.9	3.9	3.5
Rio Hondo					
Twinning	1/29	23	6.3	7.8	- -
Red River					
Hematite Park (B)	1/28	8	1.8	1.3	3.4
Red River	1/28	10	2.2	2.9	4.4

NOTE:
NS - No Survey
(A) - Air Observed
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1970

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/28	19	3.6	13.3	8.0
Lemon	1/27	6	1.3	9.5	- -
Mineral Creek	1/28	43	10.2	13.3	8.9
Molas Lake	1/28	31	7.7	12.5	8.4
Purgatory	1/29	48	11.7	16.5	- -
Red Mountain Pass	1/28	73	21.3	23.3	17.0
Silverton Sub-Sta.	1/28	14	2.8	8.5	4.8
Spud Mountain	1/28	40	11.6	21.7	15.0
Dolores River					
Lizzard Head	1/29	40	10.8	14.2	9.4
Lone Cone	1/30	39	10.2	14.1	- -
Rico	1/29	17	4.4	10.6	5.0
Telluride	1/29	23	6.3	5.9	4.5
Trout Lake	1/29	36	9.3	11.1	7.6
San Juan River					
Chama Divide (B)	1/28	0	0.0	5.2	3.3
Chamita (B)	1/28	14	3.4	11.1	5.0
Upper San Juan	1/29	39	11.0	26.7	19.4
Wolf Cr. Pass (B)	1/29	42	11.8	23.1	17.8
Wolf Cr. Summit	1/29	42	15.0	21.3	17.7
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/29	52	14.5	18.2	11.5
Blue Mesa	NS			- -	- -
Butte	1/30	46	12.3	12.0	- -
Cochetopa Pass (B)	1/28	32	6.7	2.5	3.4
Crested Butte	1/29	39	9.1	11.7	7.5
Keystone	1/29	59	15.2	15.5	12.6
Lake City	1/27	32	7.3	4.2	- -
Mesa Lakes (B)	1/29	48	11.2	15.8	10.3
McClure Pass	1/26	34	10.2	11.8	11.6
Park Cone	1/27	33	10.2	9.1	6.2
Park Reservoir	1/29	55	14.1	21.0	14.1
Porphyry Creek	1/30	48	14.1	10.5	10.1
Tomichi	1/30	38	11.4	9.6	7.5
Surface Creek					
Alexander Lake	1/29	52	14.5	18.2	11.5
Mesa Lakes (B)	1/29	48	11.2	15.8	10.3
Park Reservoir	1/29	55	14.1	21.0	14.1
Uncompahgre River					
Ironton Park	1/30	41	11.1	10.7	7.6
Red Mountain Pass	1/28	73	21.3	23.3	17.0
Telluride (B)	1/29	23	6.3	5.9	4.5
COLORADO BASIN					
Blue River					
Blue River	1/28	41	8.1	6.4	5.1
Fremont Pass	1/28	59	14.6	10.5	9.5
Frisco	1/28	35	7.9	6.3	4.3
Grizzly Peak	1/29	68	17.5	12.0	9.8
Hoosier Pass (B)	1/28	53	12.9	7.2	7.6
Shrine Pass	1/28	63	16.2	14.4	9.6
Snake River	1/28	39	9.7	7.4	4.9
Summit Ranch	1/27	25	5.9	- -	4.4
Colorado River					
Arrow	1/27	41	12.1	9.0	6.4
Berthoud Pass	1/27	48	12.9	9.3	8.3
Berthoud Summit	1/29	66	17.8	9.5	10.8
Cooper Hill	1/30	47	10.6	7.6	- -
Fiddler Gulch	NS			- -	8.7
Glenmar Ranch	1/26	29	6.4	6.6	4.7
Gore Pass	1/27	31	8.0	8.7	5.9
Grand Lake	1/29	31	7.0	7.3	4.8
Lake Irene	1/27	63	17.2	13.2	13.0
Lapland	NS			6.2	- -
Lulu	NS			- -	- -
Lynx Pass	1/27	37	9.0	10.5	6.6
McKenzie Gulch	1/28	23	3.9	8.1	3.4
Middle Fork	1/26	33	7.3	7.3	5.4
Milner	1/27	46	12.1	10.8	8.7
North Inlet	1/28	37	7.6	6.7	5.3
Pando	1/28	38	9.5	8.3	5.7
Phantom Valley	1/27	38	9.4	9.0	6.1
Ranch Creek	1/27	35	8.5	6.7	5.1
Tennessee Pass (B)	1/30	42	9.9	7.7	6.2
Vail Pass	1/28	68	17.3	12.3	10.0
Vasquez	1/28	50	11.6	7.4	6.9
Roaring Fork River					
Aspen	1/28	45	13.0	12.5	8.9
Chapman	2/2	54	13.3	10.8	- -
Independence Pass	1/24	48	12.2	11.8	9.5
Ivanhoe	1/27	56	16.3	12.5	9.6
Kiln	1/27	40	9.6	10.2	- -
Last Chance	1/28	35	7.8	8.1	- -
Lift	1/28	43	12.9	12.7	10.3
McClure Pass	1/26	34	10.2	11.8	11.6
Nast	1/28	28	5.6	6.4	3.7
North Lost Trail	1/26	40	10.6	15.1	9.5
Williams Fork River					
Glenmar Ranch	1/26	29	6.4	6.6	4.7
Jones Pass	1/28	56	14.8	10.3	7.8
Middle Fork	1/26	33	7.3	7.3	5.4
Willow Creek					
Granby	1/26	28	6.8	5.6	4.6
Willow Cr. Pass	1/26	38	10.3	9.4	7.1
Plateau Creek					
Mesa Lakes	1/29	48	11.2	15.8	10.3
Park Reservoir	1/29	55	14.1	21.0	14.1
Trickle Divide	1/29	57	14.9	24.0	15.3
YAMPA BASIN					
Elk River					
Clark	1/29	31	7.0	11.0	8.3
Elk River	1/29	52	12.5	14.5	11.1
Hahn's Peak	1/29	42	9.8	12.9	- -
White River					
Burro Mountain	1/29	49	12.5	14.6	10.7
Rio Blanco	1/28	50	12.6	12.6	8.9
Yampa River					
Bear River	NS			- -	- -
Columbine Lodge (B)	1/28	73	18.1	17.9	13.6
Dry Lake	1/27	50	13.7	14.5	12.2
Lynx Pass (B)	1/27	37	9.0	10.5	6.6
Rabbit Ears	1/28	83	22.4	20.4	15.9
Yampa View	1/28	51	12.8	12.6	8.8

NOTE:
NS - No Survey
(A) - Air Observed
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/13/69	11.1	7.4	6.1	6.4
Willow Pass	11/14/69	9.5	6.4	5.7	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	11/14/69	6.9	3.4	3.9	3.7
Big Thompson River					
Beaver Dam	10/23/69	7.1	5.5	3.6	3.8
Guard Station	10/23/69	6.9	3.4	2.9	3.4
Two Mile	10/23/69	9.1	6.9	5.1	5.5
Clear Creek					
Clear Creek	11/19/69	9.5	7.7	5.7	7.1
Hoop Creek	11/19/69	4.9	3.3	2.9	2.9
Cache La Poudre River					
Feather	11/4/69	10.1	8.3	4.0	4.5
Laramie Road	11/4/69	12.4	9.9	6.5	7.8
South Platte River					
Hoosier Pass	11/13/69	7.8	4.8	4.7	4.9
Kenosha Pass	11/13/69	4.4	2.7	2.3	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/30/69	6.7	4.4	3.1	3.9
Leadville	11/19/69	7.8	4.8	4.0	4.2
Twin Lakes Tunnel	11/13/69	4.5	1.6	0.9	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	10/31/69	10.7	7.1	4.7	5.5
Rio Grande					
Alberta Park	10/30/69	8.2	5.8	4.9	5.0
Bristol View	10/30/69	6.1	5.9	2.9	3.9
LaVeta	10/31/69	11.9	8.2	10.0	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	10/29/69	6.7	0.7	2.1	2.5
Chamita	10/24/69	8.0	3.4	5.0	2.4
Rio Grande					
Aqua Piedra	11/13/69	7.2	5.8	3.9	3.1
Big Tesuque	10/15/69	3.7	0.8	0.9	1.5
Fenton Hill	11/25/69	6.5	5.7	2.1	3.8
Rio En Medio	10/15/69	3.5	0.5	0.9	1.4
Taos Canyon	11/13/69	3.3	2.5	2.0	2.3
Red River					
Red Summit	11/13/69	4.8	2.0	1.8	2.2
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/12/69	9.1	5.9	3.3	6.3
Mineral Creek	11/12/69	5.7	2.6	2.1	3.7
Molas Lake	11/12/69	9.4	4.5	3.0	4.6
Dolores River					
Dolores	11/12/69	19.6	8.2	9.8	6.7
Lizzard Head	11/12/69	11.8	4.4	3.7	8.3
Rico	11/12/69	13.8	10.4	5.5	9.9

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
Gunnison River					
King	10/30/69	3.3	2.2	2.1	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/13/69	4.2	3.1	2.7	2.8
Colorado River					
Berthoud Pass	10/15/69	3.9	3.2	1.9	2.8
Gore	11/16/69	4.9	3.3	- -	2.5
Grand Mesa	10/15/69	12.5	9.3	8.5	9.3
Ranch Creek	10/15/69	8.7	5.7	5.0	6.0
Vail	11/19/69	12.3	9.5	8.1	6.9
Roaring Fork River					
Placita	12/2/69	9.3	6.5	5.1	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	12/4/69	19.0	6.1	8.7	11.8

ALL PROFILES 4 FEET DEEP

USDA SCS PORTLAND OREG 1967 MP-L-1845

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

MAR 26 1970
DOC EX

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAR. 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1966

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

March 1, 1970

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

March 1, 1970

THE SNOW PACK IN NORTHERN COLORADO REMAINS EXCELLENT. THE MIDDLE AREA OF COLORADO HAS ABOUT AVERAGE SNOW AND THE SNOW IN LOWER PORTION OF COLORADO AND NORTHERN NEW MEXICO IS VERY DEFICIENT.

WATER SHORTAGES WILL EXIST IN SOUTHERN COLORADO AND NEW MEXICO UNLESS THE NEXT TWO MONTHS PRODUCES MUCH ABOVE NORMAL SNOW.

FEBRUARY WAS ONE OF THE WARMEST AND DRIEST ON RECORD. RADIATION HAS EATEN AWAY MUCH OF THE SNOW ON SOUTH FACING SLOPES. LOW ELEVATION SNOWS HAVE DISAPPEARED.

CARRY-OVER RESERVOIR STORAGE IS EXCELLENT IN BOTH STATES AND WILL PROVIDE GOOD SUPPLEMENT TO EXPECTED STREAMFLOWS. ALL AREAS OF BOTH STATES EXCEPT THE LOWER RIO GRANDE ARE REPORTING GOOD SOIL MOISTURE IN THE IRRIGATED AREAS.

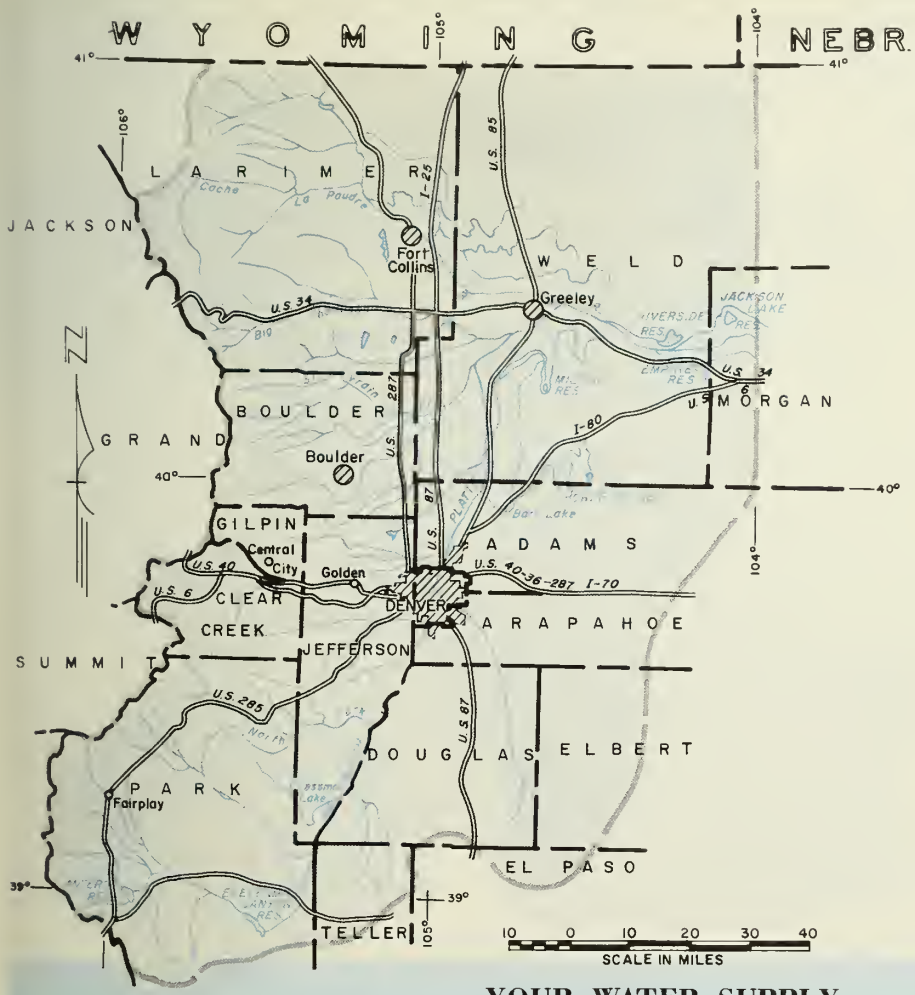
COLORADO-- THE SNOW PACK DECLINED OVER THE ENTIRE STATE. THE SNOW FALL WAS LESS THAN NORMAL AND TEMPERATURES WERE MUCH ABOVE NORMAI LOW ELEVATION SNOWS HAVE BEEN EVAPORATED OR MELTED AWAY. SOUTHERN EXPOSED SLOPI HAVE BEEN SUBJECT TO INTENSE RADIATION ALL MONTH. THE MIDDLE AND NORTHERN PARTS OF THE STATE SHOULD STILL HAVE ADEQUATE WATER SUPPLIES, WHILE THE SOUTHERN PORTI WILL EXPERIENCE SHORT SUPPLIES. DESPITE THE WARM, DRY, WEATHER, MOST AREAS OF THE STATE ARE REPORTING GOOD SOIL MOISTURE. SOME REPORTS INDICATE THE SURFACE LAYERS OF SOIL AS DRY, BUT GOOD MOISTURE DOWN A FEW INCHES. RESERVOIR STORAGE IS GOOD AND WILL PROVIDE AN EXCELLENT SUPPLEMENT. MORE SNOW IS NEEDED TO INSURI ADEQUATE SUPPLIES IN SOUTHERN HALF OF THE STATE.

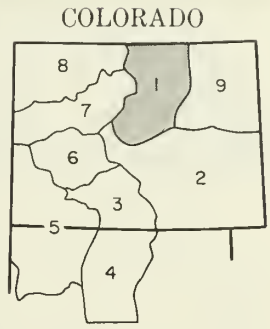
NEW MEXICO-- THE SNOWFALL MUST BE MUCH ABOVE NORMAL DURING MARCH OR VERY SHORT WATER SUPPLIES CAN BE EXPECTED IN ALL AREAS OF NEW MEXICO SUPPLIED BY SNOW MELT WATER. THE CURRENT SNOW PACK IS APPROACHING THE MINIMUM OF RECORD. MANY SNOW COURSES SHOW LESS SNOW ON MARCH FIRST THAN FEBRUARY FIRST. SNOWFALL DURING THE MONTH WAS DEFICIENT AND RADIATIO ATE AWAY AT THE SOUTH EXPOSED SLOPES. MANY OF THE SOUTHERN SLOPES ARE BARE. RESERVOIR STORAGE IS UP FROM LAST YEAR AND WILL PROVIDE SOME SUPPLEMENT TO STREAMFLOW. SOIL MOISTURE IN THE MIDDLE AND SOUTHERN PORTIONS OF THE STATE IS REPORTED AS FAIR. THE NORTHERN PORTION HAS GOOD SOIL MOISTURE.

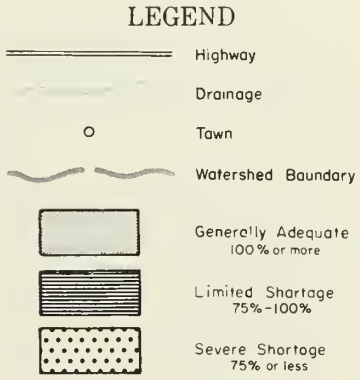
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO







YOUR WATER SUPPLY

THE SNOW PACK ON THE SOUTH PLATTE DRAINAGE CONTINUES TO BE MUCH ABOVE AVERAGE. STREAMFLOW FORECASTS RANGE FROM 116% ON THE CACHE LA POUDRE TO 136% ON THE ST. VRAIN. SUMMER WATER SUPPLIES SHOULD BE ADEQUATE. RESERVOIR STORAGE IS GOOD WITH 112% OF LAST YEARS AND 133% OF THE 1953-67 AVERAGE.

SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED TO BE GOOD. FEBRUARY'S WARM TEMPERATURES HAS DRIED OUT THE SURFACE SOILS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average†
Big Thompson at Drake (2)	125	125*	100
Boulder at Orodell	60	122	49
Cache La Poudre at Canon Mouth (1)	250	116	215
Clear Cr. at Golden	160	134	119
Saint Vrain at Lyons	95	136	70

(1) Observed flow minus by-pass to power plants.
(2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(3) Observed flow minus diversion through August P. Gumlick Tunnel.
(4) Observed flow minus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average†
Big Thompson	5	156	146
Boulder	3	192	140
Cache La Poudre	8	133	145
Clear Creek	6	174	146
Saint Vrain	2	179	149
South Platte	3	163	147

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average†
Big Thompson	3	136	124
Boulder	1	87	92
Cache La Poudre	2	173	148
Clear Creek	2	128	110
Saint Vrain	2	119	119
South Platte	2	107	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average†
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	24.9	24.7	18.9
Black Hollow	8.0	4.0	3.7	3.3
Boyd Lake	44.0	30.4	38.4	27.8
Cache La Poudre	9.5	8.4	4.7	7.0
Carter Lake	108.9	91.3	90.3	71.3
Chambers Lake	8.8	3.0	2.6	2.7
Cheesman	79.0	79.1	40.6	46.4
Cobb Lake	34.0	18.5	14.6	9.9
Eleven Mile	97.8	96.4	94.6	72.0
Fossil Creek	11.6	9.9	6.2	6.1
Gross	43.1	37.4	35.1	24.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average†
Halligan	6.4	5.9	4.5	3.8
Horsetooth	143.5	93.3	98.4	93.6
Lake Loveland	14.3	12.0	4.2	8.1
Lone Tree	9.2	8.1	1.6	6.2
Mariano	5.4	5.1	5.5	3.9
Marshall	10.3	5.4	2.1	2.5
Marston	18.0	16.0	13.8	14.3
Milton	24.4	13.4	14.6	9.5
Standley	42.0	23.0	24.9	9.8
Terry Lake	8.2	0.0	4.4	4.9
Union	12.7	11.3	3.7	7.5
Windsor	18.6	13.0	10.9	8.4

† 1953-1967 period.

*This year in percent of

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IN UPPER ARKANSAS IS 124% OF THE 1953-67 AVERAGE. MOST OF THE ABOVE AVERAGE SNOW PACK IS IN THE LEADVILLE AREA. THE CUCHARAS AND PURGATORIE SNOW PACK IS 71%. THIS IS LESS THAN LAST MONTH DUE TO BELOW NORMAL SNOWFALL AND WARM TEMPERATURES. THE RESERVOIR STORAGE IS GOOD WITH 376% OF LAST YEAR'S AND 170% OF AVERAGE. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS IS FAIR TO GOOD. STREAMFLOW FORECASTS ON THE ARKANSAS AND ITS TRIBUTARIES ARE SLIGHTLY BELOW AVERAGE. MORE SNOW IS NEEDED TO ASSURE ADEQUATE WATER FOR SUMMER.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average †
		*	
Arkansas nr Pueblo (1)	270	91	298
Ark. at Salida (1)	290	94	309
Cucharas nr LaVeta	14	117	12
Purgatoire at Trinidad	40	87	46

(1) Observed flow plus change in Clear Creek, Twin Lakes, and Turquoise Reservoirs minus diversions through Busk-Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Avg.
Fountain Creek	Avg.	Avg.
Grape	Avg.	Avg.
Hardscrable Creek	Avg.	Avg.
Huerfano	Avg.	Avg.
Monument Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Arkansas	10	128	124
Cucharas and Purgatoire	2	85	71

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Arkansas	3	135	104
Cucharas and Purgatoire	1	82	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Adobe	61.6	18.4	0.0	11.5
Clear Creek	11.4	10.2	8.0	6.6
Cucharas	40.0	1.5	0.7	6.9
Great Plains	150.0	118.4	6.7	35.4
Horse Creek	26.9	20.9	0.4	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
John Martin	353.9	46.8	15.8	85.1
Meredith	41.9	25.4	0.0	9.0
Model	15.0	1.4	1.5	3.1
Turquoise	130.0	42.8	26.6	7.0
Twin Lakes	57.9	36.6	26.0	20.1

† 1953-1967 period.

*This year in percent of avg.

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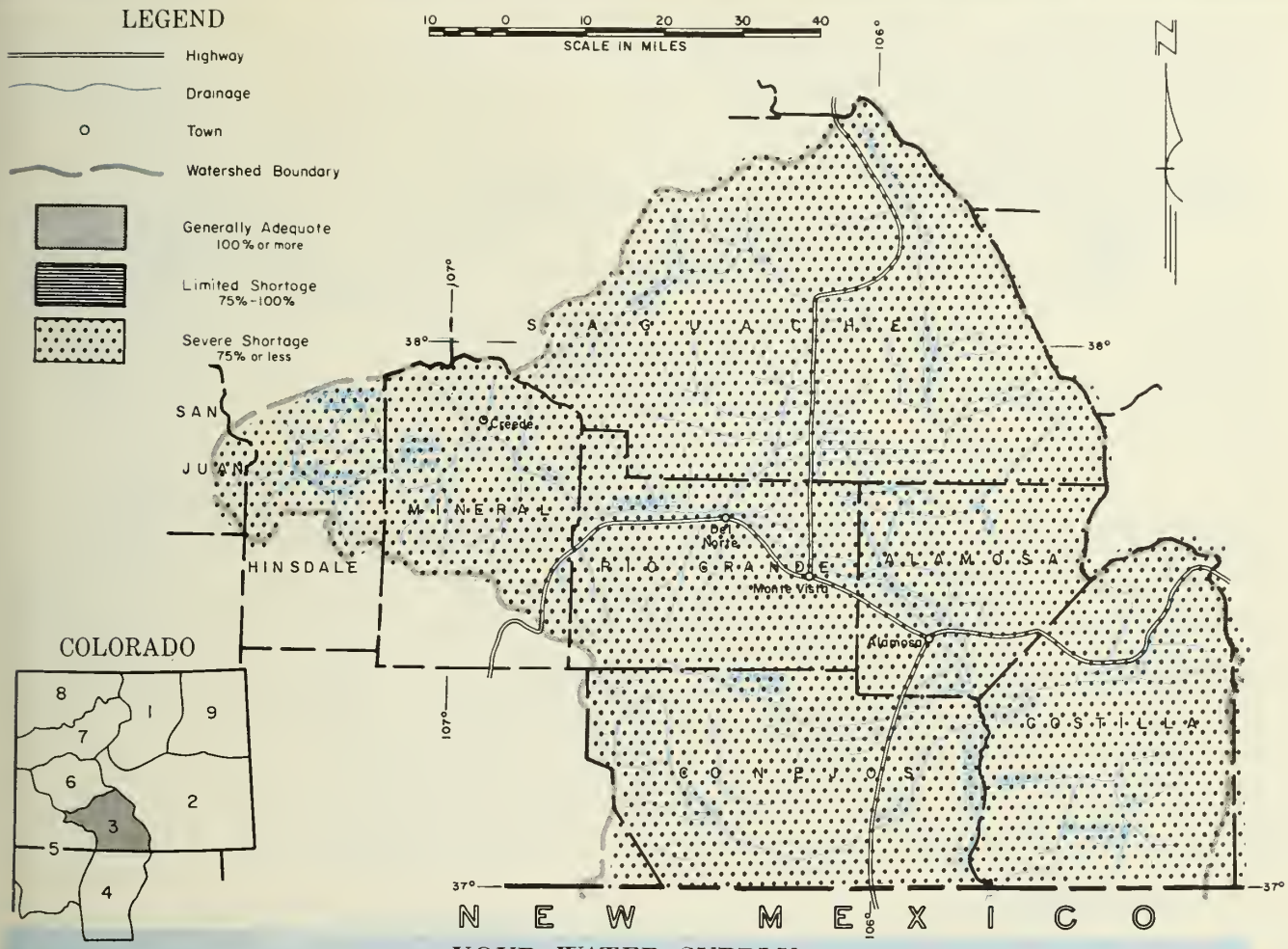
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK IN THIS AREA IS VERY DEFICIENT. SOME SNOW COURSES ARE APPROACHING THE MINIMUM OF RECORD. UNLESS THE NEXT COUPLE OF MONTHS PRODUCE MUCH ABOVE NORMAL SNOW, WATER SHORTAGES WILL EXIST THIS SUMMER.

MOUNTAIN SOILS CONTAIN GOOD MOISTURE AND WILL TEND TO INCREASE RUNOFF. RESERVOIR STORAGE IS 169% OF AVERAGE AND WILL PROVIDE SOME SUPPLEMENT TO EXPECTED STREAMFLOW.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Alamosa abv Terrace	40	65	62
Conejos nr Mogote(1)	115	63	182
Culebra at San Luis (2)	15	79	19
Rio Gr. at 30 Mile Bridge (3)	90	77	117
Rio Gr. nr Del Norte (3)	320	73	438
So. Fk. at So. Fk	75	68	110

(1) Observed flow plus change in storage in Platoro Reservoir.
(2) Observed flow plus change in storage in Sanchez Reservoir.
(3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	41	49
Conejos	3	37	48
Culebra	2	71	70
Rio Grande	10	54	66

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	150	131
Conejos	1	151	129
Culebra	1	86	109
Rio Grande	3	112	124

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	6.2	6.4	4.4
Platoro	60.0	3.0	3.0	7.1
Rio Grande	45.8	27.7	21.3	12.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	19.0	11.8	10.6
Santa Maria	45.0	6.3	3.8	5.5
Terrace	17.7	11.0	11.2	3.7

+ 1953-1967 period.

*This year in percent of avg.

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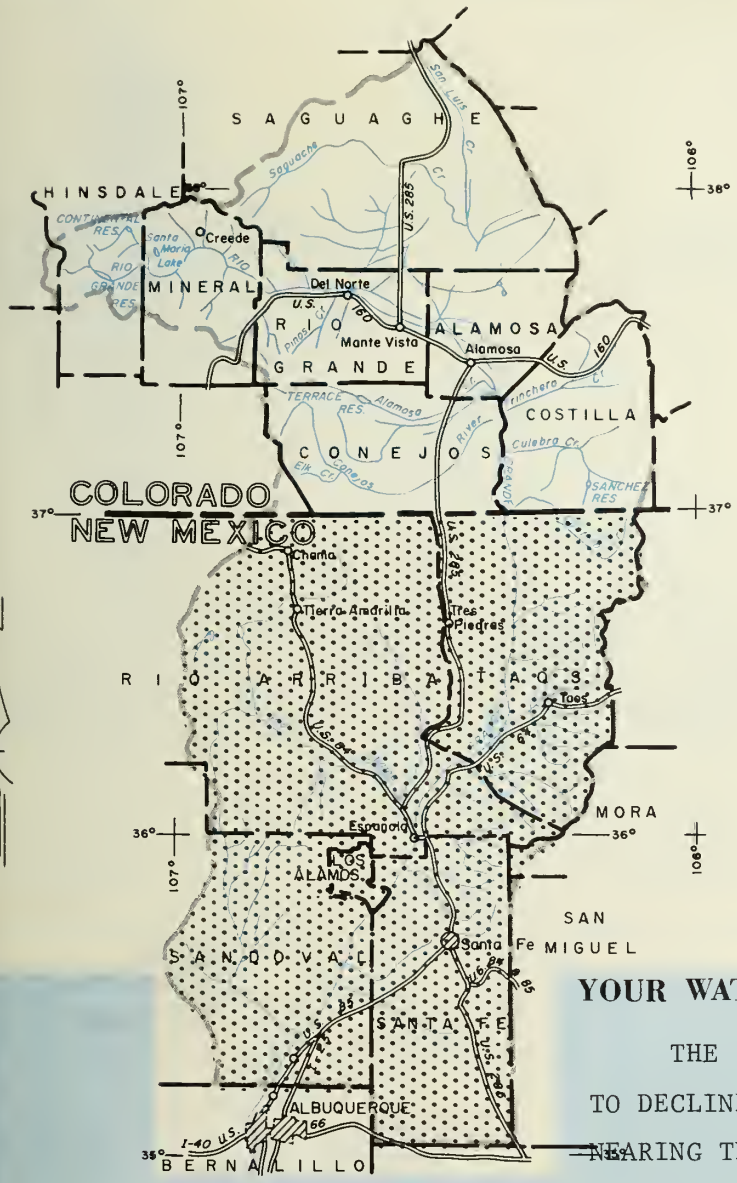
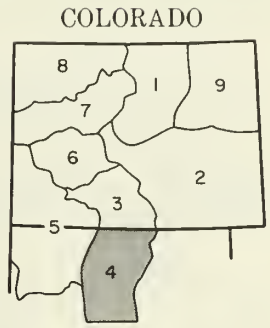
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

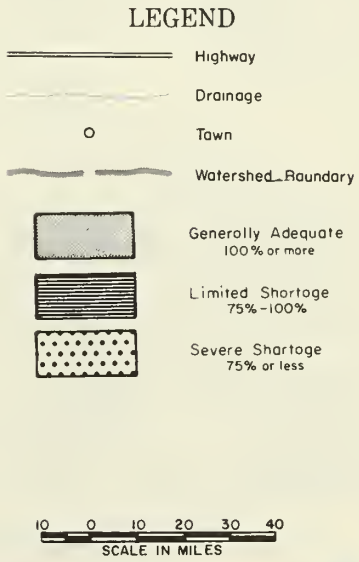
as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO







YOUR WATER SUPPLY

THE SNOW PACK IN NEW MEXICO CONTINUES TO DECLINE. THE CURRENT SNOW PACK IS NEARING THE MINIMUM OF RECORD. A NUMBER OF SNOW COURSES ARE ALREADY AT A MINIMUM. WATER SHORTAGES WILL EXIST ALL OVER THE STATE UNLESS SNOWFALL DURING MARCH IS MUCH ABOVE NORMAL.

RESERVOIR STORAGE IS GOOD AND WILL BE AN EXCELLENT SUPPLEMENT THIS SUMMER.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Costilla at Cost.(1)	10	56	18
Pecos at Pecos	24	59	41
Rio Chama to ElVado	120	64	188
Rio Gr. at Otowi (2)	300	58	513
Rio Gr. at San Mar(2)	160	48	334
Rio Hondo nr Valdez	10	67	15
Red R. at mouth nr Questa	23	72	32

The forecast of the Rio Grande at San Marcial is 25 % of the Average used by the Elephant Butte Irrigation District.
(1) Observed flow plus change in Costilla Reservoir.
(2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	6	6
Rio Chama	4	30	48
Rio Grande, N.M.	12	39	45
Rio Hondo	1	62	--
Red River	2	54	55

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	53	75
Rio Chama	2	84	73
Rio Grande	4	68	80
Red River	1	94	79

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	80	68	76
Caballo	344	81	60	81
Conchas	273	232	124	163
Elephant Butte	2195	574	406	370

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
ElVado	195	1	1	4
McMillen-Avalon	32	38	8	20

+ 1953-1967 period.

*This year in percent of avg.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER SHEDS IN COLORADO AND NEW MEXICO

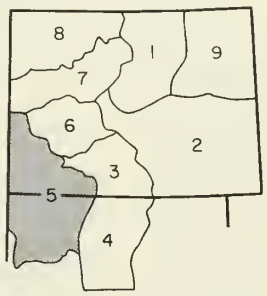
March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO



10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW PACK IN THIS AREA CONTINUES TO DECLINE. CURRENT SNOW PACK IS CONSIDERABLY BELOW NORMAL ON ALL BASINS EXCEPT THE DOLORES. STREAMFLOW FORECASTS FOLLOW A SIMILAR PATTERN. ALL STREAMS WILL FLOW MUCH BELOW NORMAL UNLESS THE NEXT TWO MONTHS PRODUCE MUCH ABOVE AVERAGE SNOW.

CARRY-OVER STORAGE IN THE BASIN'S RESERVOIR IS GOOD. SOIL MOISTURE IS REPORTED AS GOOD.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Apr-Sept [redacted]	Average +
		*	
Animas at Durango	320	78	409
Dolores at Dolores	180	78	231
La Plata at Hesperus	15	63	24
Los Pinos at Bayfield (1)	125	64	194
Piedra Cr. at Piedra	90	55	163
San Juan at Carracas	250	66	379
Inflow to Navajo Res (1) (Apr-Jul)	420	68	619

(1) Observed flow plus change in storage in allicito reservoir

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Fair	Poor
Mancos	Fair	Poor
San Miguel	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	51	76
Dolores	4	59	98
San Juan	5	42	57

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	155	89
Dolores	3	121	92
San Juan	2	143	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	13	13	7
Lemon	40	30	22	15
Navajo	1036	926	870	
Vallecito	126	75	69	48

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

*This year in percent of avg.

Return if not delivered
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COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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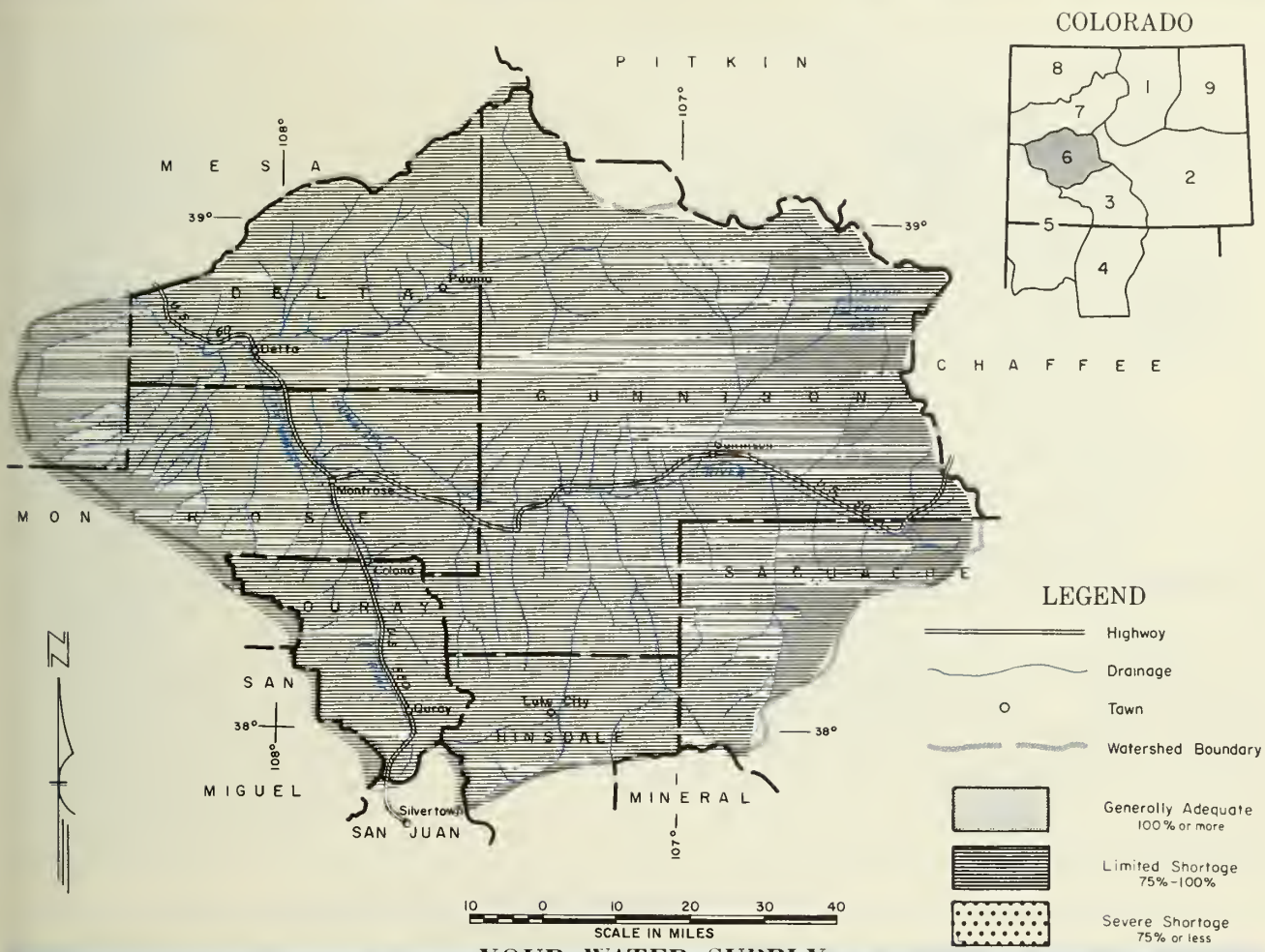
FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FOR THE FIRST TIME THIS YEAR THE SNOW PACK IN THIS AREA HAS FALLEN BELOW NORMAL. ONLY SCATTERED SNOW FELL DURING THE MONTH AND WARM TEMPERATURES WERE THE RULE.

STREAMFLOW FORECASTS RANGE FROM 85% OF THE 15 YEAR NORMAL ON THE UNCOMPAHGRE TO 94% ON SURFACE CREEK.

THIS SHOULD STILL PROVIDE NEAR ADEQUATE WATER SUPPLIES.

CARRY-OVER STORAGE IS GOOD. SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD.

This report prepared by

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DENVER, COLORADO
GRAND JUNCTION, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
		*	
Gunnison nr Gr. Junction	1000	87	1137
Surface Cr. nr Cedaridge	15	94	16
Uncomphagre at Colona	110	85	129

(1) Observed flow plus change in storage in Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Avg.	Avg.
Taylor	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	81	107
Surface Creek	3	59	90
Uncompahgre	3	85	114

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	105	116
Surface Creek	1	109	100
Uncompahgre	1	109	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	500	422	--
Morrow Point	121	85	49	--
Taylor	106	97	39	56

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

*This year in percent of avg.

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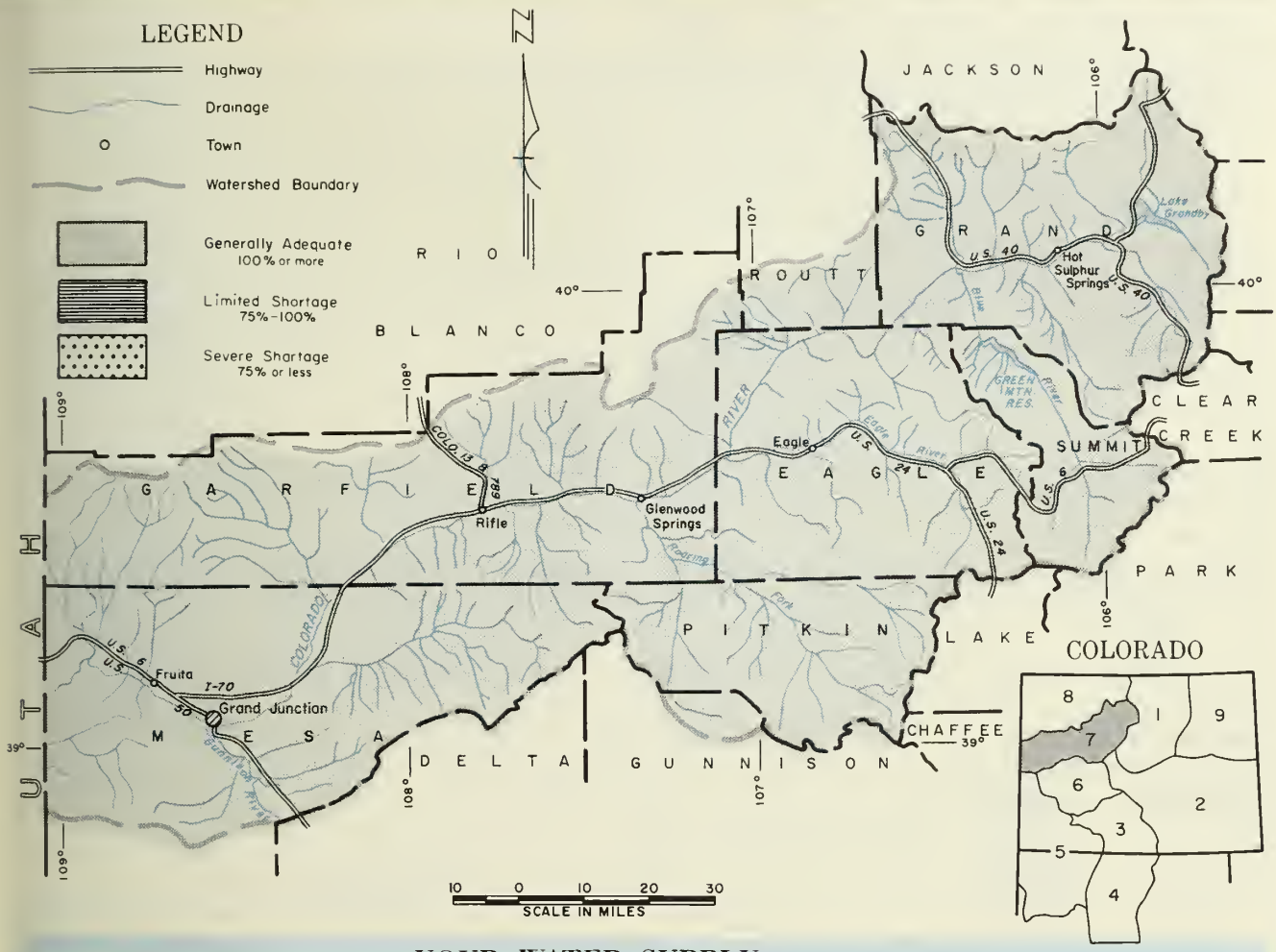
FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW PACK IN THE UPPER COLORADO BASIN DID NOT GAIN MUCH DURING FEBRUARY. THE ABOVE SEASONAL TEMPERATURES TOOK ITS TOLL OF THE SNOW, ESPECIALLY AT THE LOW ELEVATIONS AND SOUTH EXPOSED SLOPES.

FORECASTS STILL REMAIN GOOD AND NEAR NORMAL WATER SUPPLIES ARE STILL EXPECTED.

SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS IS REPORTED AS GOOD.

RESERVOIR STORAGE IS ABOVE NORMAL.

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
		*	
Blue ab Gr. Mt. (1)	300	127	236
Colo Rv inflow to Granby Res. (2)	225	103	219
Colo Rv nr Dotsero(3)	1400	102	1375
Roar. Fk at GlSpr.(4)	650	93	692
Wm. Fk nr Par. (5)	80	133	60
Will. Cr. inflow to Will. Cr. Res.	58	126	46
Colo. nr Cameo (6)	2250	102	2216

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir.
(2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch.
(3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs.
(4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir.
(5) Observed flow plus diversions through August P. Gumlick Tunnel.
(6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	7	153	153
Colorado	20	123	138
Plateau	3	55	82
Roaring Fork	7	90	109
Williams Fork	2	110	132
Willow	2	100	132

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	115	111
Colorado	4	118	111
Roaring Fork	1	127	125
Willow	1	112	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	239	237	130
Granby	466	264	147	233
Green Mountain	147	71	83	63
Homestake	43	18	17	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	75	--	--
Williams Fork	97	46	25	27
Willow Creek	9	7	7	6
Vega	32	14	11	11

+ 1953-1967 period.

*This year in percent of avg.

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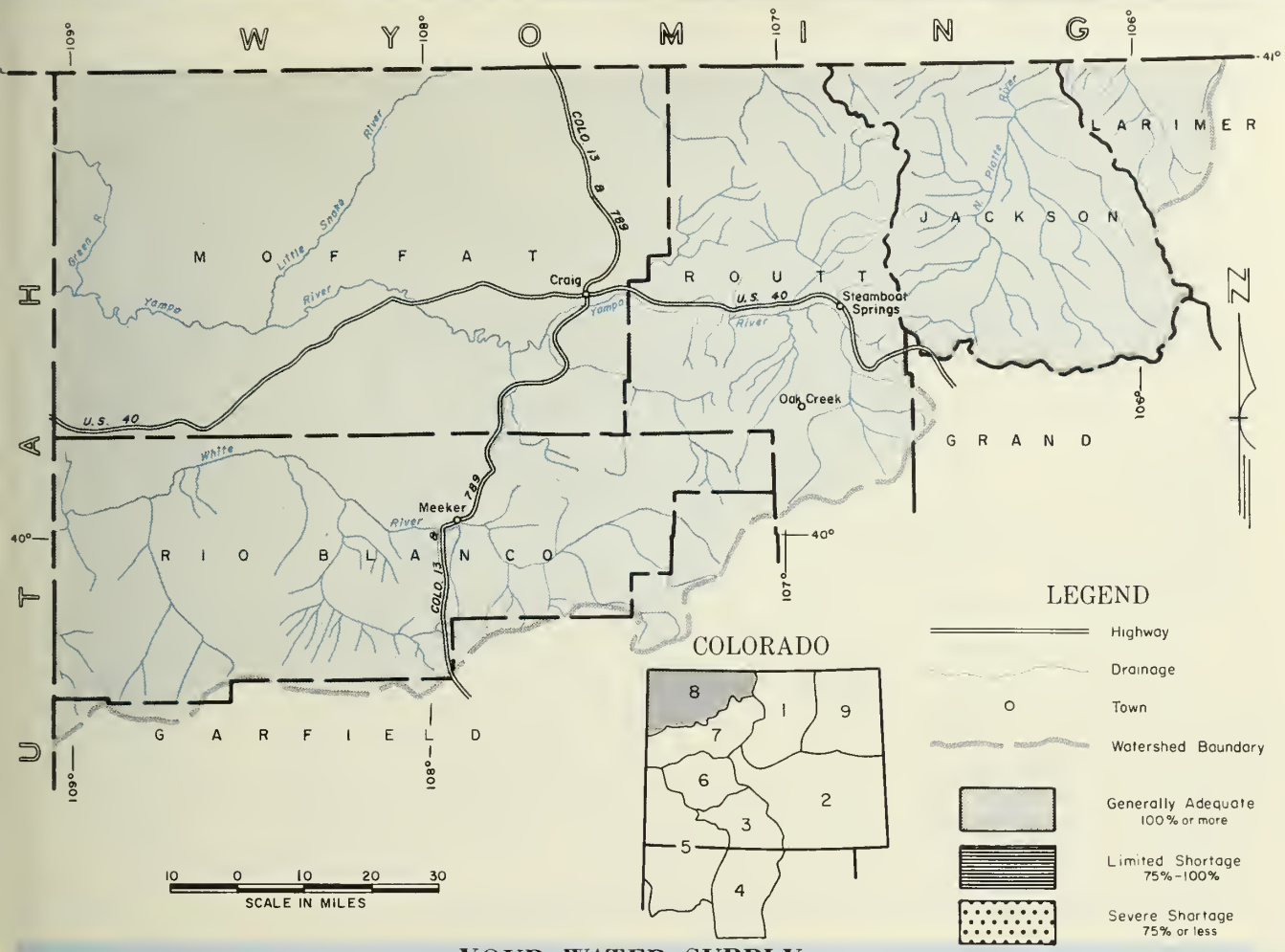
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL IN THIS AREA WAS BELOW NORMAL FOR FEBRUARY. THIS COMBINED WITH ABOVE NORMAL TEMPERATURES HAS REDUCED EXPECTED FLOWS. ALL STREAMS ARE STILL EXPECTED TO FLOW ABOVE NORMAL AND PROVIDE ADEQUATE WATER SUPPLIES THIS SUMMER.

FLOW ON SMALL STREAMS SHOULD BE GOOD MOST OF THE YEAR.

SOIL MOISTURE IS STILL REPORTED AS GOOD DESPITE THE WARM TEMPERATURES.

MOUNTAIN SOILS ARE GENERALLY WET.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Elk at Clark	200	105	191
Laramie at Jelm	149	143	104
Little Snake at Lily	400	144	277
No. Platte at Northgate			
White nr Meeker	300	102	293
Yampa nr Maybell	900	105	853
Yampa at Steamboat Springs	295	113	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	83	93
Laramie	2	124	134
North Platte	5	104	125
White	2	97	107
Yampa	5	105	120

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	2	173	148
North Platte	2	117	105
Yampa	1	70	52

+ 1953-1967 period.

*This year in percent of avg.

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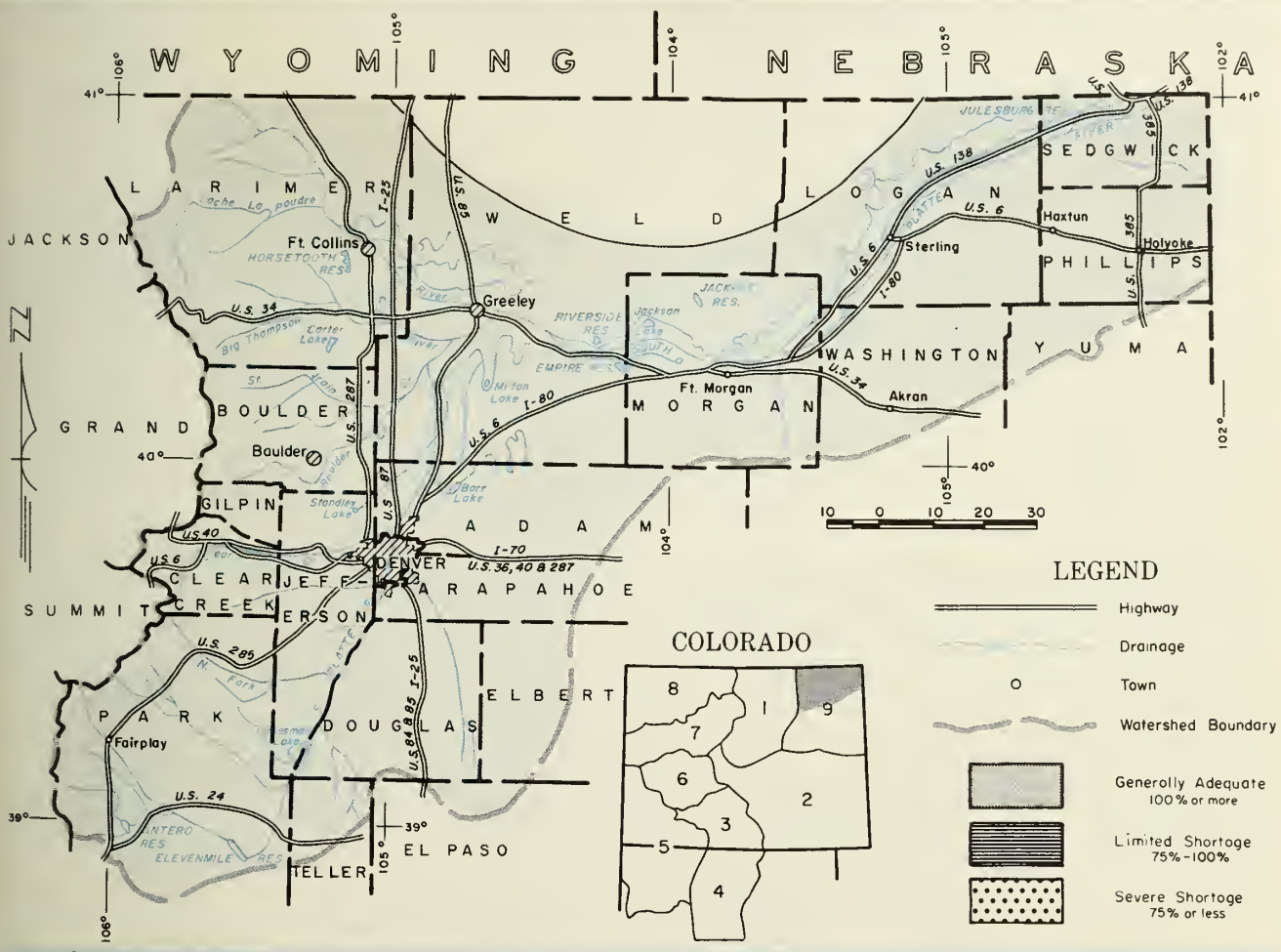
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK ON THE SOUTH PLATTE DRAINAGE CONTINUES TO BE MUCH ABOVE AVERAGE. SUMMER WATER SUPPLIES SHOULD BE ADEQUATE. STREAMFLOW FORECASTS RANGE FROM 116% ON THE CACHE LA POUDRE TO 136% ON THE ST. VRAIN.

RESERVOIR STORAGE IS GOOD WITH 111% OF LAST YEAR AND 125% OF THE 1953-67 AVERAGE.

SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED TO BE GOOD. FEBRUARY'S WARM TEMPERATURES HAS DRIED OUT THE SURFACE SOILS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average †
		*	
Big Thompson at Drake (2)	125	125	100
Boulder at Orodell	60	122	49
Cache La Poudre at Canon Mouth (1)	250	116	215
Clear Cr. at Golden (3)	160	134	119
Saint Vrain at Lyons	95	136	70

(1) Observed flow plus by-pass to power plants.
(2) Observed flow minus diversions through August P. Gumlick Tunnel.
(3) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Exc.	Avg.
South Platte from Ft. Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	156	146
Boulder	3	192	140
Cache La Poudre	8	133	145
Clear Creek	6	174	146
Saint Vrain	2	179	149
South Platte	3	163	147

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	136	124
Boulder	1	87	92
Cache La Poudre	2	173	148
Clear Creek	2	128	110
Saint Vrain	2	119	119
South Platte	2	107	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Carter	108.9	91.3	90.3	71.3
Cheesman	79.0	79.1	40.6	46.4
Eleven Mile	97.8	96.4	94.6	72.0
Empire	37.7	29.9	31.3	27.2
Horsetooth	143.5	93.3	98.4	93.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Jackson	35.4	30.5	31.5	30.8
Julesburg	28.2	20.1	20.5	20.7
Prewitt	32.8	25.6	8.8	14.5
Point of Rocks	70.0	66.2	62.2	49.9
Riverside	57.5	53.9	52.9	44.6

† 1953-1967 period.

*This year in percent of avg.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1970

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/27	57	17.9	15.5	12.6
McIntyre	NS			- -	- -
Roach	2/25	63	18.2	13.5	14.4
North Platte River					
Cameron Pass	2/26	73	27.0	25.1	18.8
Columbine Lodge	2/26	72	23.5	21.3	19.6
Northgate	2/26	26	7.0	7.0	5.3
Park View	2/24	35	9.5	9.5	7.2
Willow Cr. Pass(B)	2/24	42	12.1	13.2	9.8
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/26	35	8.7	4.3	5.8
Boulder Falls	2/27	47	14.6	8.4	9.1
University Camp	2/27	59	19.5	9.6	15.6
Big Thompson River					
Deer Ridge	2/27	28	8.2	3.1	3.9
Hidden Valley	2/26	42	11.3	7.2	7.9
Lake Irene (B)	2/26	68	22.3	16.4	18.2
Long's Peak	2/28	41	11.3	6.9	8.0
Two Mile	2/26	58	17.3	11.4	10.9
Cache La Poudre					
Bennett Creek	2/27	32	9.9	5.3	- -
Big South	3/1	8	2.2	0.4	2.4
Cameron Pass	2/26	73	27.0	25.1	18.8
Chambers Lake	3/1	39	12.3	7.2	7.2
Deadman Hill	2/27	57	17.9	15.5	12.6
Hour Glass Lake	2/27	33	9.4	4.9	5.1
Joe Wright	2/26	72	25.1	19.5	- -
Lost Lake	3/1	44	14.2	8.4	9.6
Pine Creek	2/26	4	1.1	1.9	1.6
Red Feather	2/26	25	6.9	5.1	5.6
Clear Creek					
Baltimore (B)	2/26	35	8.7	4.3	5.8
Berthoud Falls	2/26	56	15.6	9.0	11.5
Empire	2/26	32	9.7	4.1	6.0
Grizzly Peak (B)	2/25	70	23.2	13.5	13.4
Loveland Lift	2/26	64	20.6	13.0	17.7
Loveland Pass	2/26	58	19.4	12.0	12.3
Saint Vrain River					
Copeland Lake	2/25	22	5.6	3.5	3.7
Ward	2/26	28	7.1	3.6	4.8
Wild Basin	NS			- -	9.7
South Platte River					
Como	2/26	37	9.4	4.4	- -
Geneva Park	2/25	30	6.0	2.4	3.1
Horseshoe Mt.	2/25	47	12.4	8.0	- -
Hoosier Pass	2/27	51	13.9	9.4	10.5
Jefferson Creek	2/26	43	11.0	7.2	7.4
Mosquito	2/25	48	13.0	7.6	- -
Trout Creek Pass	2/25	24	4.9	3.8	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/25	28	6.2	2.4	4.8
Cooper Hill (B)	2/27	48	12.8	8.8	8.5
East Fork	2/25	42	11.8	8.3	7.6
Four Mile Park	2/26	26	6.7	4.4	4.6
Fremont Pass	2/26	59	17.0	12.7	12.4
Garfield	2/26	37	11.4	11.6	11.4
Hermit Lake	2/25	20	6.1	- -	- -
Monarch Pass	2/26	49	15.0	14.5	14.3
Tennessee Pass	2/26	43	10.3	8.2	8.5
Twin Lakes Tunnel	2/28	38	10.9	6.8	8.6
Westcliffe	2/25	22	5.0	6.0	5.7
Cucharas River					
Blue Lakes	2/26	13	2.6	- -	3.5
Cucharas Pass	2/26	27	5.8	3.9	- -
LaVeta Pass (B)	2/26	21	5.0	7.0	7.8
Purgatorie River					
Bourbon	2/25	29	5.0	5.1	6.4
RIO GRANDE BASIN-Colo.					
Alamosa River					
Silver Lakes	2/26	7	1.7	7.2	5.5
Summitville (A)	2/28	46	8.2	17.0	14.6
Conejos River					
Cumbres (A)	2/28	22	6.2	24.5	16.5
Platoro (A)	2/28	32	9.4	15.5	13.8
River Springs	2/27	7	1.8	7.4	5.8
Culebra River					
Brown Cabin	2/28	9	3.1	4.8	- -
Cottonwood (B)	NS			6.5	- -
Culebra	2/26	25	5.6	7.9	7.3
LaVeta Pass (B)	2/26	21	5.0	7.0	7.8
Trinchera (B)	2/28	24	5.4	6.2	- -
Rio Grande					
Cochetopa Pass	2/25	36	8.4	3.4	4.5
Grayback	NS			- -	- -
Hiway	2/26	45	13.3	25.2	21.4
Lake Humphrey	2/27	13	2.9	5.4	6.2
Love Lake (A)	2/28	16	4.0	5.4	- -
Pass Creek	2/26	14	4.2	13.2	10.8
Pool Table	2/27	18	4.2	4.6	5.9
Porcupine	2/27	31	7.4	8.4	8.7
Santa Maria	2/26	5	1.3	5.1	4.4
Upper Rio Grande	3/1	17	2.8	11.0	6.6
Wolf Creek Pass	2/26	47	13.0	29.3	22.9
Wolf Cr. Sum. (B)	2/26	56	17.5	28.0	22.1
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	2/24	1	0.2	3.3	3.2
Rio Chama					
Bateman	2/26	26	6.2	13.9	9.4
Capulin Peak	2/26	9	2.7	6.6	4.5
Chama Divide	2/27	0	0.0	6.7	3.6
Chamita	2/27	14	3.3	13.3	7.9
Rio Grande					
Aspen Grove	2/26	9	2.8	4.3	5.2
Big Tesuque	2/25	3	1.0	6.8	4.6
Bluebird Mesa	2/25	5	1.3	6.2	4.7
Cordova (A)	2/28	21	6.5	10.8	9.7
Elk Cabin	2/26	4	1.0	1.7	3.3
Fenton Hill	2/26	2	0.4	6.2	3.9
Pajarito Peak	2/26	0	0.0	1.0	1.5
Payrole (A)	2/28	19	4.0	9.8	7.8
Quemazon	2/26	21	4.5	7.6	7.7
Rio En Medio	2/25	15	5.1	10.0	7.9
Sandoval	2/25	6	1.4	4.7	5.0
Taos Canyon	2/26	7	1.6	5.9	4.4
Tres Ritos	2/26	10	3.6	5.3	4.8
Rio Hondo					
Twinning	2/26	21	6.1	9.9	- -
Red River					
Hematite Park (B)	2/25	6	1.5	3.3	3.7
Red River	2/25	16	3.4	5.7	5.2

NOTE: NS - No Survey
(A) - Air Observed
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1970

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/26	14	3.7	18.4	10.2
Lemon	2/25	0	0.0	14.7	- -
Mineral Creek	2/26	40	11.4	17.9	11.7
Molas Lake	2/26	30	8.2	15.6	11.0
Purgatory	2/26	46	12.3	22.4	- -
Red Mt. Pass (B)	2/26	74	24.1	30.3	23.5
Silverton Sub-Sta.	2/26	10	2.6	11.1	5.6
Spud Mountain	2/26	41	12.3	28.6	19.5
Dolores River					
Lizzard Head	2/26	42	12.0	20.1	12.6
Lone Cone	2/27	38	11.2	19.7	- -
Rico	2/26	12	4.1	14.9	6.8
Telluride	2/26	31	8.2	9.0	5.9
Trout Lake	2/26	35	10.9	16.0	10.7
San Juan River					
Chama Divide (B)	2/27	0	0.0	6.7	3.6
Chamita (B)	2/27	14	3.3	13.3	7.9
Upper San Juan	2/26	45	12.9	34.6	25.2
Wolf Cr. Pass (B)	2/26	47	13.0	29.3	22.9
Wolf C. Summit	2/26	56	17.5	28.0	22.1
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/25	52	16.9	25.0	17.0
Blue Mesa	2/24	30	7.6	9.6	3.5
Butte	2/27	46	13.3	15.6	- -
Cochetopa Pass (B)	2/25	36	8.4	3.4	4.5
Crested Butte	2/26	37	11.1	15.6	10.6
Keystone	2/26	57	17.9	21.1	16.3
Lake City	2/24	33	7.6	6.0	7.6
Mesa Lakes (B)	2/26	42	12.7	19.7	13.4
McClure Pass	2/27	37	13.0	16.5	14.6
Park Cone	2/26	36	12.3	11.6	8.8
Park Reservoir	2/26	55	15.2	31.1	19.6
Porphyry Creek	2/26	49	15.4	13.7	13.9
Tomichi	2/26	37	11.7	11.1	10.2
Surface Creek					
Alexander Lake	2/25	52	16.9	25.0	17.0
Mesa Lakes (B)	2/26	42	12.7	19.7	13.4
Park Reservoir	2/26	54	15.2	31.1	19.6
Uncompahgre River					
Ironton Park	2/24	41	13.1	14.3	10.4
Red Mountain Pass	2/26	74	24.1	30.3	23.5
Telluride (B)	2/26	31	8.2	9.0	5.9
COLORADO BASIN					
Blue River					
Blue River	2/27	40	10.9	6.4	7.3
Fremont Pass	2/26	59	17.0	12.7	12.4
Frisco	2/25	36	10.4	6.5	6.3
Grizzly Peak	2/25	70	23.2	13.5	13.4
Hoosier Pass (B)	2/27	51	13.9	9.4	10.5
Shrine Pass	2/25	67	21.4	14.3	13.6
Snake River	2/25	38	10.9	7.5	6.7
Summit Ranch	2/25	29	7.7	- -	6.0
Colorado River					
Arrow	2/27	44	15.3	10.9	9.3
Berthoud Pass	2/26	56	16.1	12.1	11.6
Berthoud Summit	2/26	68	19.0	11.9	14.8
Cooper Hill	2/27	48	12.8	8.8	8.5
Fiddler Gulch	NS			- -	13.5
Glenmar Ranch	2/24	32	8.4	8.0	6.4
Gore Pass	2/25	35	10.5	9.9	8.4
Grand Lake	2/25	32	8.2	8.5	6.6
Lake Irene	2/26	68	22.3	16.4	18.2
Lapland	3/2	40	12.1	9.8	8.6
Lulu	2/26	67	22.0	14.7	13.2
Lynx Pass	2/25	43	12.2	12.2	10.0
McKenzie Gulch	2/27	22	4.9	8.0	4.8
Middle Fork	2/24	36	10.0	8.8	7.5
Milner	2/26	48	15.0	13.2	11.1
North Inlet	2/25	33	9.1	9.0	7.4
Pando	2/25	41	12.4	10.5	7.9
Phantom Valley	2/26	41	12.1	11.4	8.5
Ranch Creek	2/27	39	11.5	8.5	7.1
Tennessee Pass(B)	2/26	43	10.3	8.2	8.5
Vail Pass	2/25	63	20.6	15.1	14.0
Vasquez	2/25	51	13.9	9.8	9.5
Roaring Fork River					
Aspen	2/25	52	13.8	16.4	13.0
Chapman	2/25	53	15.9	12.9	- -
Independence Pass	2/28	55	15.4	14.2	13.9
Ivanhoe	2/25	62	19.5	15.2	13.8
Kiln	2/24	44	11.8	11.2	- -
Last Chance	2/24	32	9.8	9.2	- -
Lift	2/25	53	15.2	17.0	13.8
McClure Pass	2/27	37	13.0	16.5	14.6
Nast	2/24	26	6.5	7.9	5.2
North Lost Trail	2/27	39	12.1	18.8	13.0
Williams Fork River					
Glenmar Ranch	2/24	32	8.4	8.0	6.4
Jones Pass	2/26	57	17.3	12.2	10.9
Middle Fork	2/24	36	10.0	8.8	7.5
Willow Creek					
Granby	2/24	30	8.9	7.8	6.1
Willow Cr. Pass	2/24	42	12.1	13.2	9.8
Plateau Creek					
Mesa Lakes	2/26	42	12.7	19.7	13.4
Park Reservoir	2/26	54	15.2	31.1	19.6
Trickle Divide	2/26	56	16.7	30.9	21.1
YAMPA BASIN					
Elk River					
Clark	2/27	33	8.9	13.4	11.5
Elk River	2/27	51	16.2	16.9	15.5
Hahn's Peak	2/27	41	12.2	15.3	- -
White River					
Burro Mountain	2/26	48	15.3	16.1	15.2
Rio Blanco	2/27	38	14.9	15.2	12.9
Yampa River					
Bear River	NS			- -	- -
Columbine Lodge(B)	2/26	72	23.5	21.3	19.6
Dry Lake	2/25	56	18.8	19.2	17.6
Lynx Pass (B)	2/25	43	12.2	12.2	10.0
Rabbit Ears	2/26	77	27.0	24.4	21.2
Yampa View	2/26	47	15.5	15.3	12.3

NOTE:

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/13/69	11.1	7.4	6.1	6.4
Willow Pass	11/14/69	9.5	6.4	5.7	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	11/14/69	6.9	3.4	3.9	3.7
Big Thompson River					
Beaver Dam	10/23/69	7.1	5.5	3.6	3.8
Guard Station	10/23/69	6.9	3.4	2.9	3.4
Two Mile	10/23/69	9.1	6.9	5.1	5.5
Clear Creek					
Clear Creek	11/19/69	9.5	7.7	5.7	7.1
Hoop Creek	11/19/69	4.9	3.3	2.9	2.9
Cache La Poudre River					
Feather	11/4/69	10.1	8.3	4.0	4.5
Laramie Road	11/4/69	12.4	9.9	6.5	7.8
South Platte River					
Hoosier Pass	11/13/69	7.8	4.8	4.7	4.9
Kenosha Pass	11/13/69	4.4	2.7	2.3	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/30/69	6.7	4.4	3.1	3.9
Leadville	11/19/69	7.8	4.8	4.0	4.2
Twin Lakes Tunnel	11/13/69	4.5	1.6	0.9	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	10/31/69	10.7	7.1	4.7	5.5
Rio Grande					
Alberta Park	10/30/69	8.2	5.8	4.9	5.0
Bristol View	10/30/69	6.1	5.9	2.9	3.9
LaVeta	10/31/69	11.9	8.2	10.0	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	2/26/70	6.7	1.3	1.3	3.2
Chamita	2/27/70	8.0	4.0	5.0	4.1
Rio Grande					
Aqua Piedra	2/27/70	7.2	4.4	4.2	3.7
Big Tesuque	2/25/70	3.7	0.9	2.0	1.9
Fenton Hill	11/25/69	6.5	5.7	2.1	3.8
Rio En Medio	2/25/70	3.5	0.4	0.4	1.2
Taos Canyon	2/26/70	3.3	1.6	4.2	2.3
Red River					
Red Summit	2/25/70	4.8	1.5	1.6	1.9
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/12/69	9.1	5.9	3.3	6.3
Mineral Creek	11/12/69	5.7	2.6	2.1	3.7
Molas Lake	11/12/69	9.4	4.5	3.0	4.6
Dolores River					
Dolores	11/12/69	19.6	8.2	9.8	6.7
Lizzard Head	11/12/69	11.8	4.4	3.7	8.3
Rico	11/12/69	13.8	10.4	5.5	9.9

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
Gunnison River					
King	10/30/69	3.3	2.2	2.1	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/13/69	4.2	3.1	2.7	2.8
Colorado River					
Berthoud Pass	10/15/69	3.9	3.2	1.9	2.8
Gore	11/16/69	4.9	3.3	- -	2.5
Grand Mesa	10/15/69	12.5	9.3	8.5	9.3
Ranch Creek	10/15/69	8.7	5.7	5.0	6.0
Vail	11/19/69	12.3	9.5	8.1	6.9
Roaring Fork River					
Placita	12/2/69	9.3	6.5	5.1	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	12/4/69	19.0	6.1	8.7	11.8

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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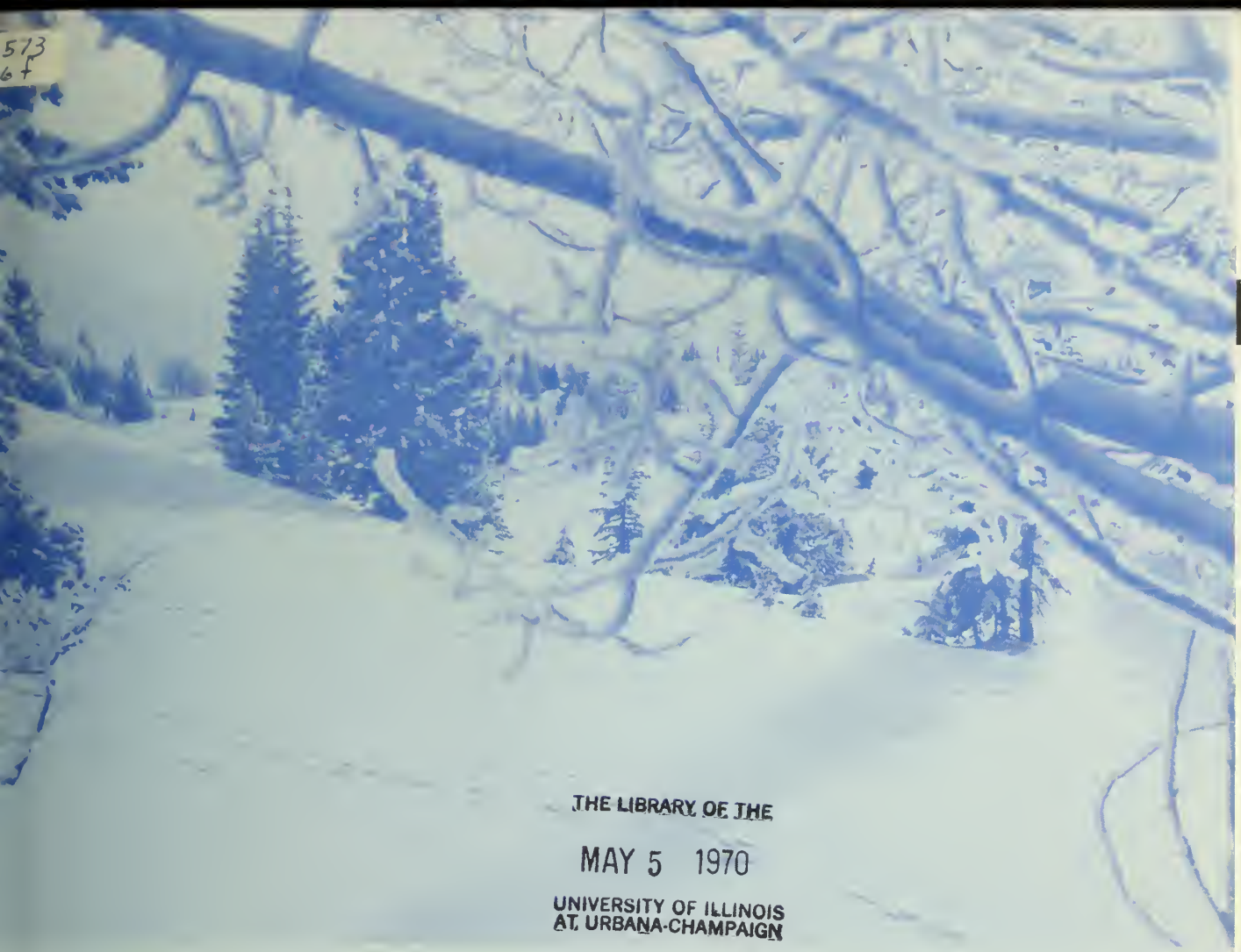
"The Conservation of Water begins with the Snow Survey"



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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
APR. 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early seoson forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are alsa included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtoined from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Socramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS-PORTLAND, OREG 1966

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

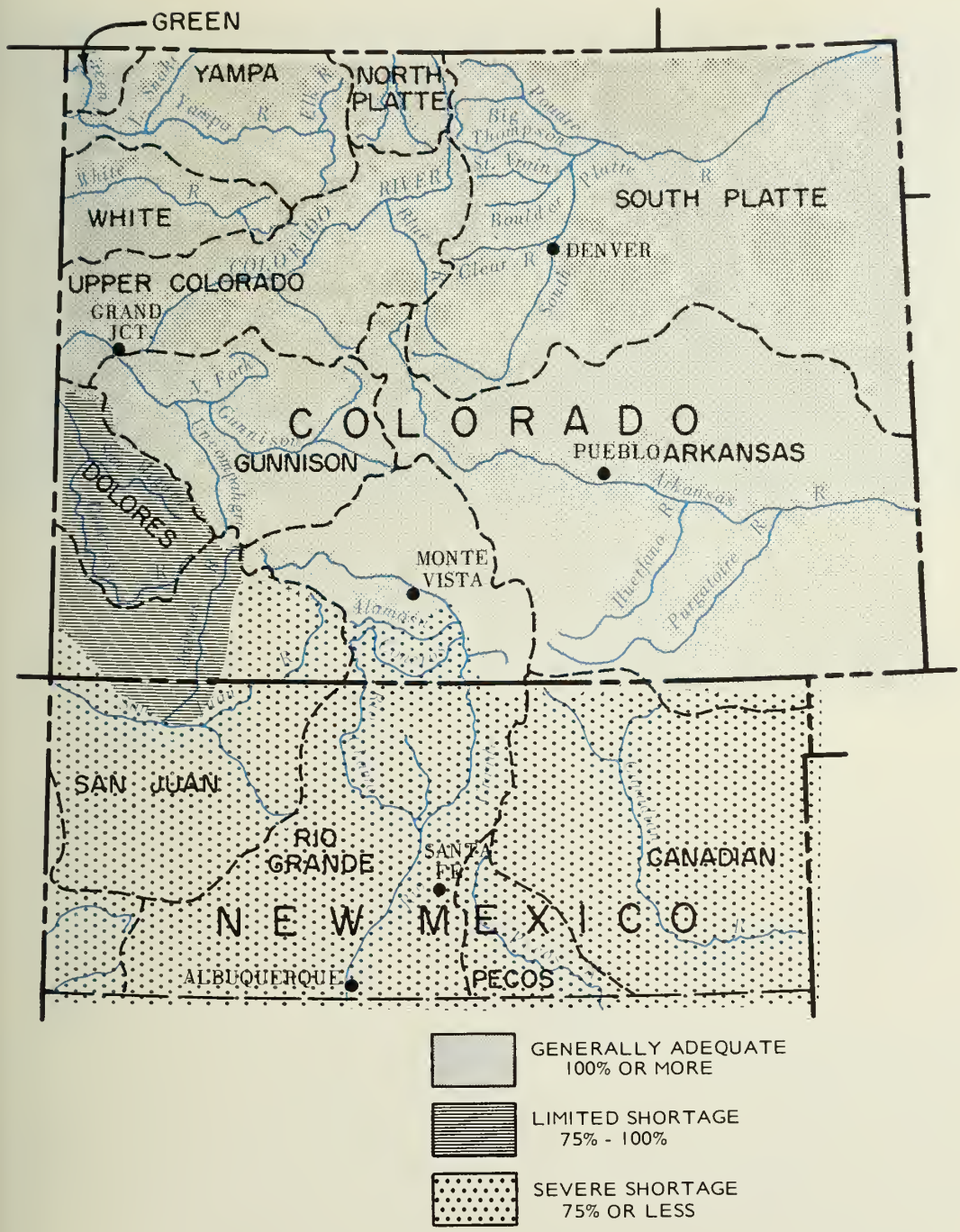
APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

April 1, 1970



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

April 1, 1970

THE WATER SUPPLY OUTLOOK IMPROVED SLIGHTLY IN BOTH COLORADO AND NEW MEXICO. SOUTHERN COLORADO AND NEW MEXICO WILL STILL HAVE SOME WATER SHORTAGE UNLESS THE NEXT FEW WEEKS PRODUCE MUCH ABOVE NORMAL SNOWFALL. CENTRAL COLORADO STREAMS SHOULD FLOW ABOUT NORMAL. NORTHERN COLORADO STREAMS, ESPECIALLY THE SOUTH PLATTE AND ITS TRIBUTARIES SHOULD FLOW MUCH ABOVE NORMAL. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR. IF SUMMER PRECIPITATION IS ABOVE NORMAL FLOWS WILL BE INCREASED. RESERVOIR STORAGE IS ABOVE NORMAL IN BOTH STATES. THIS WILL BE A GOOD SUPPLEMENTAL SUPPLY. SOIL MOISTURE IN THE FLAT LANDS WAS IMPROVED BY LAST OF THE MONTHS SNOWSTORM. MOUNTAIN SOILS ARE IN GOOD CONDITION.

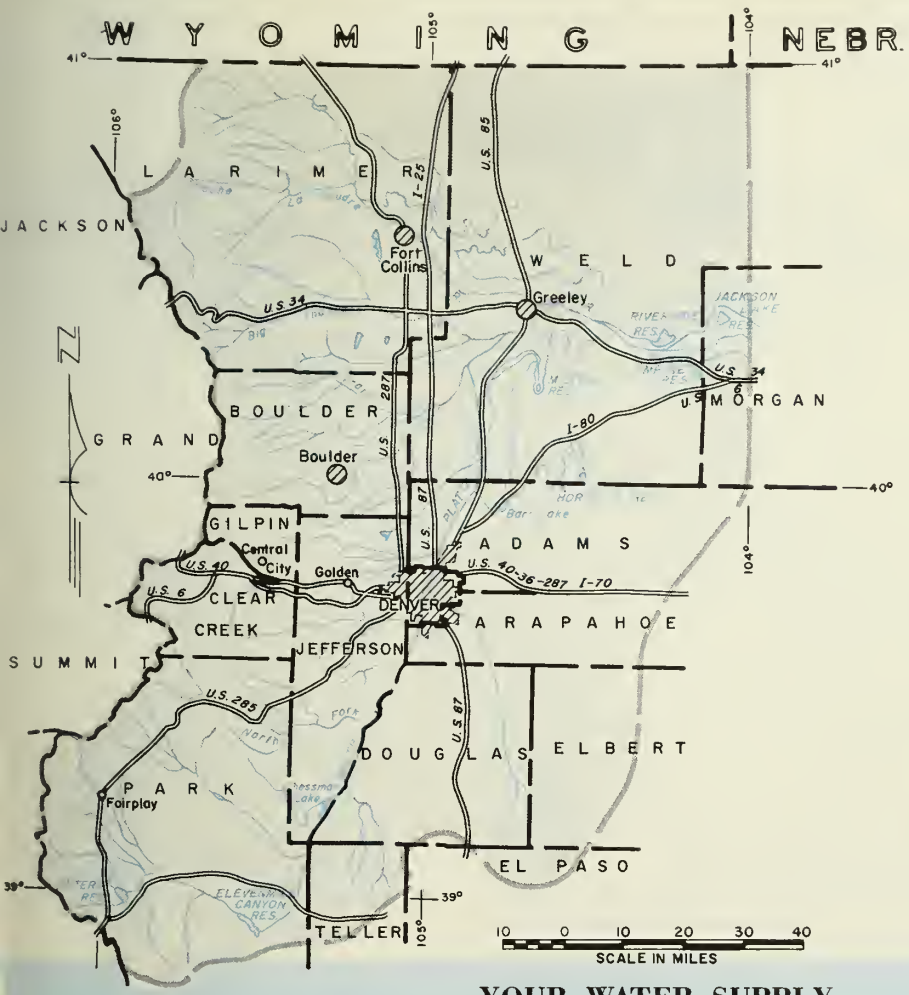
COLORADO -- A LARGE SNOWSTORM WHICH STRUCK MOST OF COLORADO AT THE END OF THE MONTH HAS IMPROVED THE WATER SUPPLY OUTLOOK. SOME SNOW COURSES DO NOT REFLECT THIS STORM. THE SOUTH PLATTE SEEMS TO BE HARDEST HIT. SNOW FELL OVER MOST OF THE IRRIGATED LANDS ADDING TO THE SOIL MOISTURE. THE RIO GRANDE AND SAN JUAN DRAINAGES WILL BOTH HAVE SOME WATER SHORTAGES THIS SUMMER. THE REST OF THE STATE SHOULD HAVE ADEQUATE SUPPLIES. CARRY-OVER STORAGE IS GOOD. SOIL MOISTURE IN THE IRRIGATED AND DRY LAND AREAS IS GOOD. MOUNTAIN SOILS ARE WET AND WILL TEND TO INCREASE RUNOFF. THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES SHOWED ADDITIONAL IMPROVEMENT DURING THE MONTH AND CAN LOOK FORWARD TO AN EXCELLENT WATER YEAR.

NEW MEXICO -- NEW MEXICO SNOWFALL WAS SLIGHTLY IMPROVED DURING THE MONTH, HOWEVER, SHORTAGES ARE STILL EXPECTED. SEVERAL AREAS RECEIVED CONSIDERABLY ABOVE NORMAL SNOWFALL. RED RIVER AND CHAMA AREAS HAD ABOUT 150% OF NORMAL SNOWFALL. THE RIO GRANDE BASIN HAD A SLIGHT IMPROVEMENT ESPECIALLY IN COLORADO. STREAMFLOWS ARE EXPECTED TO BE BELOW 75% OF THE 1953-67 AVERAGE. RESERVOIR STORAGE IS 142% OF NORMAL. ELEPHANT BUTTE CONTAINS 535,000 ACRE FEET COMPARED TO A NORMAL OF 334,000. CONCHAS CONTAINS 140% OF NORMAL CARRY OVER. McMILLEN-AVALON HAS ABOVE NORMAL STORAGE. SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED AS GOOD.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

THE SOUTH PLATTE DRAINAGE SHOULD HAVE EXCELLENT WATER SUPPLIES THIS SUMMER. STREAMS ARE ALL FORECASTED FOR FLOW ABOVE NORMAL. THEY RANGE FROM 132% OF NORMAL ON THE BIG THOMPSON TO A HIGH OF 147% ON CLEAR CREEK AT GOLDEN.

CARRY-OVER STORAGE ON THE AREA'S MANY RESERVOIRS IS 131% OF NORMAL. FIRST OF THE MONTH SNOW LEFT IRRIGATED SOILS IN EXCELLENT CONDITION AND MOUNTAIN SOILS ARE WET.

WATER SUPPLIES SHOULD BE BETTER THAN ANY RECENT YEARS.

This report prepared by
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DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average †
Big Thompson at Drake (1)	132	132	100
Boulder at Orodell	70	143	49
Cache La Poudre at Canon Mouth (2)	290	135	215
Clr. Cr. at Golden (3)	175	147	119
St. Vrain at Lyons (4)	100	143	70

(1) Observed flow minus by-pass to power plants.
(2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(3) Observed flow minus diversion through August P. Gumlick Tunnel.
(4) Observed flow minus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Exc.
Coal Creek	Exc.	Exc.
North Fork of South Platte	Exc.	Exc.
North Fork of Cache La Poudre	Exc.	Exc.
Ralston Creek	Exc.	Exc.
Rock Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	165	136
Boulder	3	182	134
Cache La Poudre	6	155	142
Clear Creek	6	175	139
Saint Vrain	2	238	154
South Platte	3	188	149

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	2	137	121
Boulder	2	137	121
Cache La Poudre	2	139	134
Clear Creek	1	153	144
Saint Vrain	3	128	114
South Platte	2	111	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	27.4	26.0	21.1
Black Hollow	8.0	4.0	3.5	3.3
Boyd Lake	44.0	31.2	38.7	27.6
Cache La Poudre	9.5	8.4	6.5	7.5
Carter Lake	108.9	100.7	91.8	81.7
Chambers Lake	8.8	3.2	2.9	3.0
Cheesman	79.0	79.1	43.2	49.0
Cobb Lake	34.3	18.5	14.7	9.9
Eleven Mile	97.8	96.4	94.6	72.1
Fossil Creek	11.6	10.0	7.3	7.0
Gross	43.1	35.3	34.4	22.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	3.8	5.7	4.7
Horsetooth	143.5	108.4	110.4	106.8
Lake Loveland	14.3	11.9	4.2	8.4
Lone Tree	9.2	8.0	2.3	6.6
Mariano	5.4	5.1	5.6	4.2
Marshall	10.3	7.5	2.7	3.0
Marston	18.0	16.4	15.0	14.7
Milton	24.4	13.5	15.8	10.8
Standley	42.0	32.6	26.2	11.0
Terry Lake	8.2	.2	4.5	5.0
Union	12.7	12.7	3.3	7.6
Windsor	18.6	13.7	11.0	9.9

† 1953-1967 period.

*This year in percent of avg.

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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

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U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

WATER SUPPLIES ON THE ARKANSAS AND ITS TRIBUTARIES SHOULD BE GOOD THIS SUMMER. ALL STREAMS ARE FORECASTED ABOVE NORMAL. THESE FORECASTS RANGE FROM 117% OF NORMAL ON THE ARKANSAS AT SALIDA TO 133% ON THE CUCHARAS AT LAVETA.

RESERVOIR STORAGE IS MUCH ABOVE NORMAL AND SHOULD PROVIDE AN EXCELLENT SUPPLEMENT TO THE STREAMFLOW.

SOIL MOISTURE IN THE PLAINS AREA IS REPORTED AS EXCELLENT AND MOUNTAIN SOILS ARE WET.

A GOOD WATER SUPPLY IS IN PROSPECT THIS SUMMER.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]*	Average †
Arkansas nr Pueblo (1)	380	128	298
Ark. at Salida (1)	360	117	309
Cucharas nr LaVeta	16	133	12
Purgatoire at Trinidad	55	120	46

(1) Observed flow plus change in Clear Creek, Twin Lakes, and Turquoise Reservoirs minus diversions through Busk-Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable Creek	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Arkansas	10	142	132
Cucharas and Purgatoire	1	120	127

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Arkansas	3	134	93
Cucharas and Purgatoire	1	77	94

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Adobe	61.6	17.6	0.0	11.1
Clear Creek	11.4	10.4	8.0	7.3
Cucharas	40.0	1.7	0.7	3.3
Great Plains	150.0	73.2	6.3	38.3
Horse Creek	26.9	20.1	0.0	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
John Martin	353.9	50.8	18.9	89.4
Meredith	41.9	24.7	0.0	10.0
Model	15.0	1.1	1.5	3.1
Turquoise	130.0	42.7	31.4	7.5
Twin Lakes	57.9	36.8	26.9	19.9

*This year in percent of avg. † 1953-1967 period.

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SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

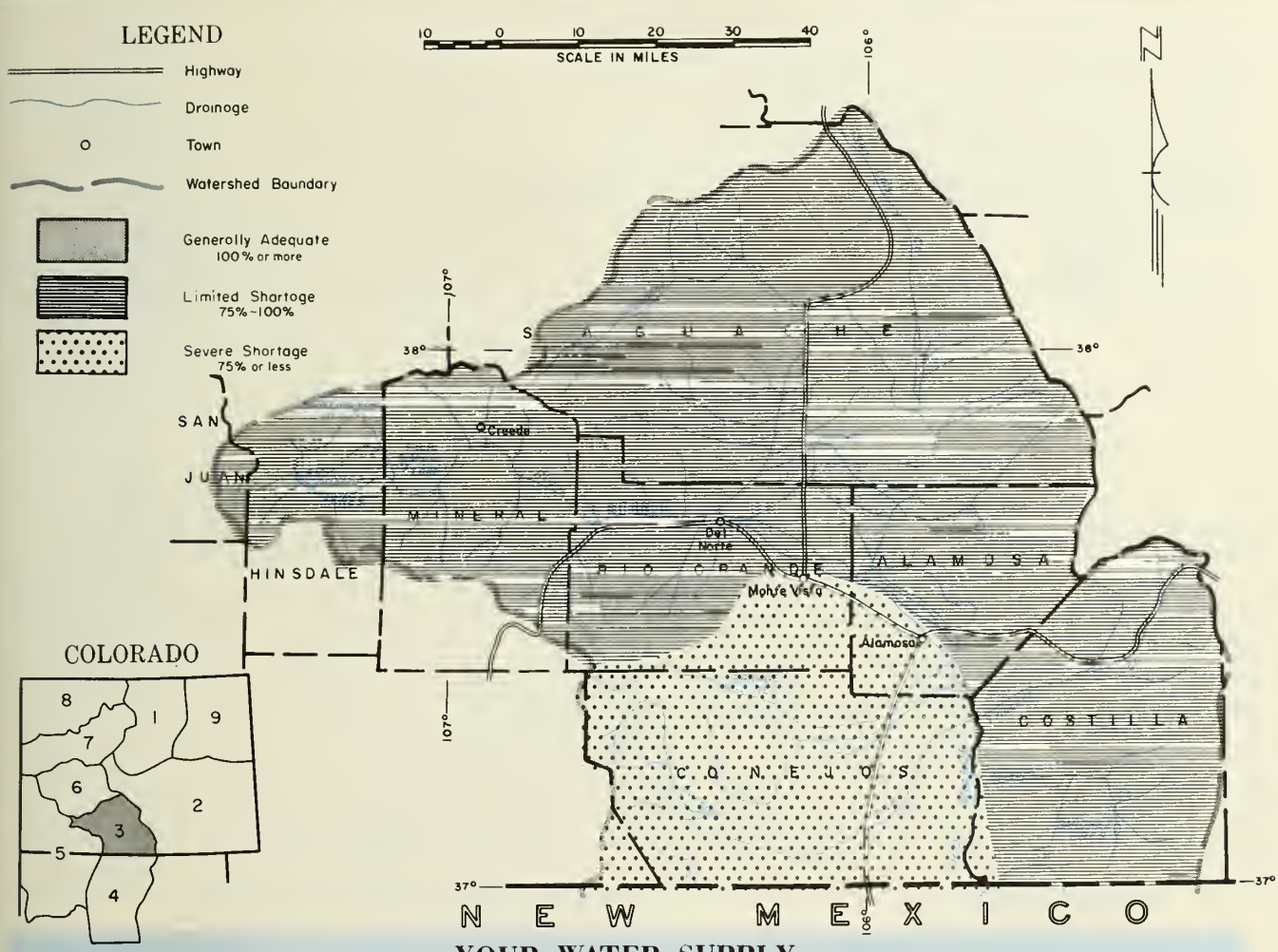
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW PACK MADE A CONSIDERABLE GAIN THIS MONTH, BUT ALL AREAS ARE STILL BELOW NORMAL. STREAMFLOW FORECASTS RANGE FROM 69% ON THE CONEJOS TO 84% ON THE CULEBRA. THE RIO GRANDE RIVER AT DEL NORTE IS FORECAST AT 80%.

RESERVOIR STORAGE IS 118% OF LAST YEAR AND 156% OF AVERAGE. ABOVE AVERAGE SNOW IS NEEDED TO PREVENT WATER SHORTAGES THIS SUMMER.

SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
Alamosa abv Terrace	44	71*	62
Conejos nr Mogote(1)	125	69	182
Culebra at San Luis (2)	16	84	19
Rio Gr. at 30 Mile Bridge (3)	97	83	117
Rio Gr. nr Del Norte (3)	350	80	480
So. Fk. at So. Fk.	78	71	110

(1) Observed flow plus change in storage in Platoro Reservoir.
(2) Observed flow plus change in storage in Sanchez Reservoir.
(3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Avg.
Sangre de Cristo Cr.	Exc.	Avg.
Trinchera	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	73	85
Conejos	3	55	75
Culebra	2	72	99
Rio Grande	10	68	82

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	100	103
Conejos	1	66	100
Culebra	2	72	83
Rio Grande	3	87	98

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	6.6	7.0	5.1
Platoro	60.0	3.0	3.0	7.1
Rio Grande	45.8	28.0	22.4	13.3

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	18.7	13.8	11.1
Santa Maria	45.0	6.7	4.3	6.0
Terrace	17.7	9.9	11.2	4.1

+ 1953-1967 period.

*This year in percent of avg.

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SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

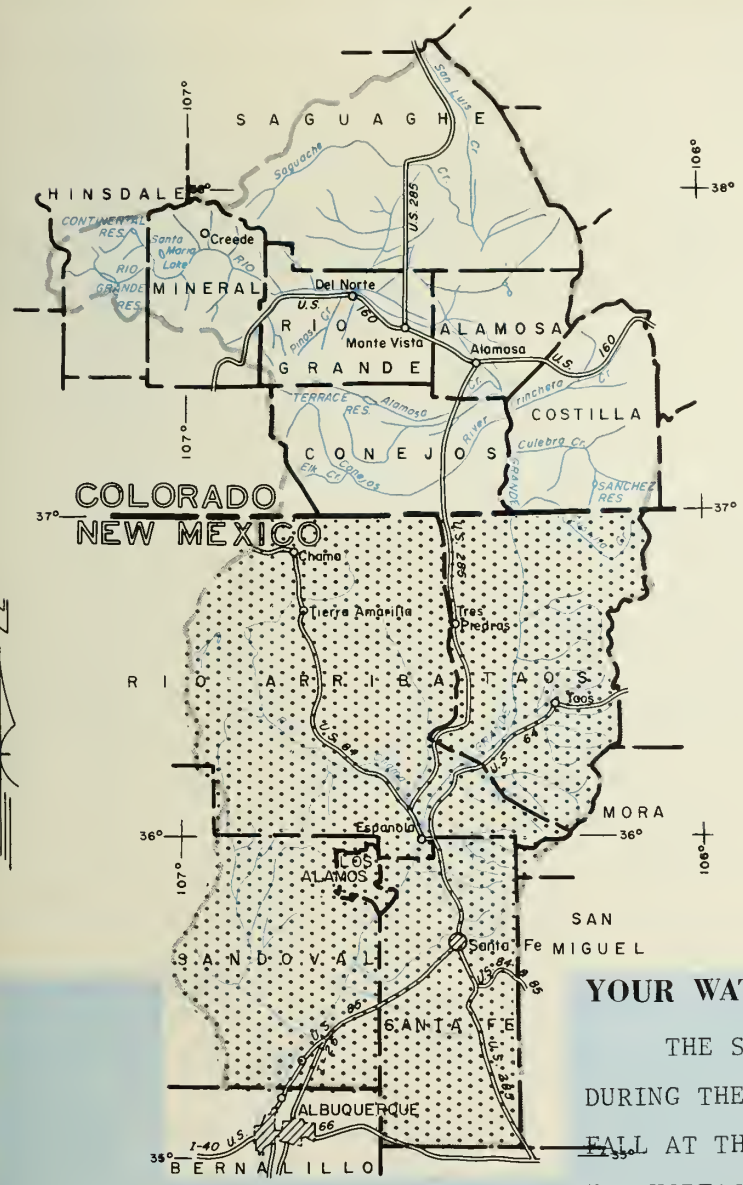
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

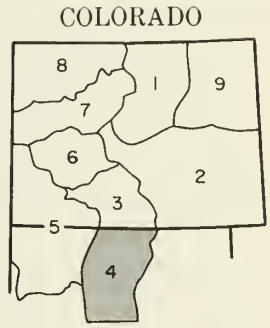
as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW PACK IN NEW MEXICO GAINED DURING THE MONTH, MAINLY BECAUSE OF SNOWFALL AT THE END OF THE MONTH. STREAMFLOW FORECASTS REMAIN BELOW AVERAGE SO WATER SHORTAGES WILL PROBABLY OCCUR THIS SUMMER. RESERVOIR STORAGE WILL BE AN EXCELLENT SUPPLEMENT WITH 161% OF LAST YEAR AND 142% OF AVERAGE.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
Costilla at Cost. (1)	15	82	18
Pecos at Pecos	28	68	41
Rio Chama to ElVado	135	72	188
Rio Gr. at Otowi (2)	350	68	513
Rio Gr. at San Mar (2)	195	58	334
Rio Hondo nr Valdez	14	93	15
Red R. at mouth nr Questa	27	83	32

The forecast of the Rio Grande at San Marcial is 30% *of the Average used by the Elephant Butte Irrigation District.*
(1) Observed flow plus change in Costilla Reservoir.
(2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Poor
Jemez River	Avg.	Poor
Mora River	Avg.	Poor
Nambe Creek	Avg.	Poor
Rio Ojo Caliante	Avg.	Poor
Rio Pueblo de Taos	Avg.	Poor
Santa Fe Creek	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	0	0
Rio Chama	4	46	81
Rio Grande, N.M.	13	60	94
Rio Hondo	1	51	--
Red River	2	65	87

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	83	71
Rio Chama	-	--	--
Rio Grande	4	133	124
Red River	1	38	32

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	85	36	64
Caballo	344	47	18	65
Conchas	273	223	125	161
Elephant Butte	2195	535	361	334

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
ElVado	195	1	4	6
McMillen-Avalon	32	35	23	22

*This year in percent of avg. + 1953-1967 period.

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SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER SHEDS IN COLORADO AND NEW MEXICO

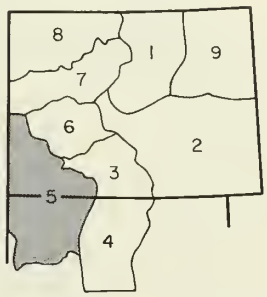
as of
April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO



10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW PACK IMPROVED [illegible] THIS MONTH, BUT THE STREAMFLOW FORECASTS REMAIN BELOW AVERAGE ON ALL STREAMS. FORECASTS RANGE FROM [illegible] ON PIEDRA CREEK TO 87% ON THE DOLORES RIVER. RESERVOIR STORAGE IS ABOVE AVERAGE. THIS WILL SUPPLEMENT IRRIGATION WATER SOME, BUT MORE SNOW IS NEEDED TO PRODUCE ADEQUATE WATER SUPPLIES THIS SUMMER. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Animas at Durango	350	86	409
Dolores at Dolores	200	87	231
La Plata at Hesperus	16	66	24
Los Pinos at Bayfield (1)	135	70	194
Piedra Cr. at Piedra	110	67	163
San Juan at Carracas	265	70	379
Inflow to Navajo Res (1) (Apr-Jul)	420	68	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Fair
Mancos	Avg.	Fair
San Miguel	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	67	95
Dolores	4	70	122
San Juan	5	55	76

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	96	72
Dolores	3	193	92
San Juan	2	97	78

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	13	13	7
Lemon	40	30	21	15
Navajo	1696	868	818	302
Vallecito	126	79	71	50

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

*This year in percent of avg.

Return if not delivered
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COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK INCREASED DURING THE MONTH TO ALMOST 110% OF AVERAGE. FORECASTS ARE IMPROVED OVER LAST MONTH WITH ALL STREAMS ABOVE AVERAGE.

SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD.

WATER STORAGE IN ALL RESERVOIRS IS ABOVE THAT OF LAST YEAR. TAYLOR PARK HAS 90,000 ACRE FEET COMPARED TO 40,000 LAST YEAR AND AN AVERAGE OF 58,000.

This report prepared by
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Issued by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Gunnison nr Gr. Junction	1375	121	1137
Surface Cr. nr Cedaridge	17	106	16
Uncomphagre at Colona	125	103	129

(1) Observed flow plus change in storage in Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Avg.
Taylor	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	11	86	111
Surface Creek	3	67	101
Uncompahgre	3	95	109

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	153	121
Surface Creek	1	107	107
Uncompahgre	1	107	107

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	413	347	--
Morrow Point	121	114	109	--
Taylor	106	90	40	58

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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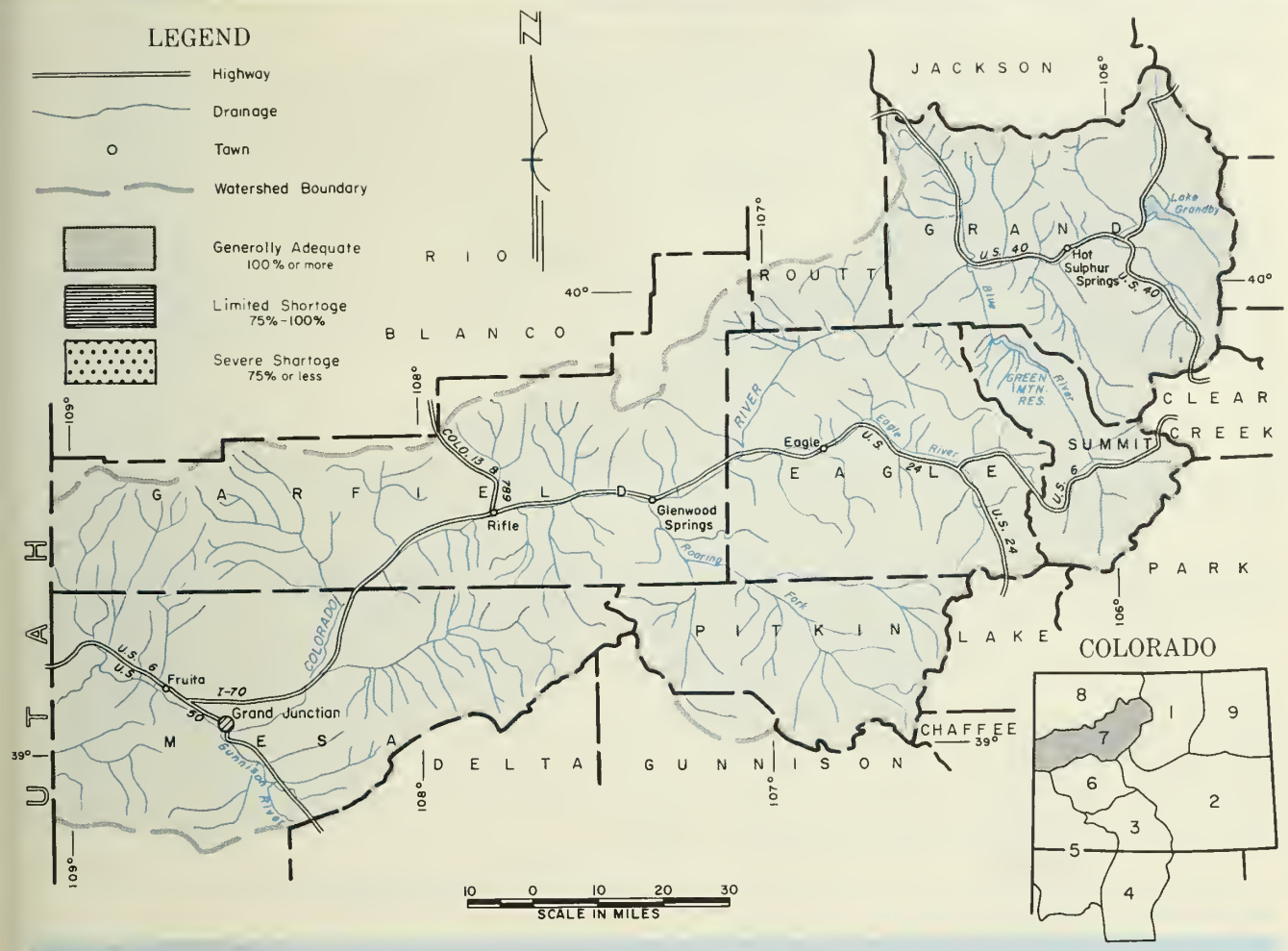
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL IN THE UPPER COLORADO BASIN WAS AVERAGE TO ABOVE AVERAGE. STREAMFLOW FORECASTS ARE IMPROVED FROM LAST MONTHS WITH MOST BEING ABOUT 130% OF AVERAGE. THEREFORE, WATER SUPPLIES FOR THIS SEASON SHOULD BE EXCELLENT. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS IS REPORTED AS GOOD. RESERVOIR STORAGE IS 94% OF LAST YEAR AND 119% OF AVERAGE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Blue ab Gr. Mt. (1)	320	136	236
Colo Rv inflow to Granby Res. (2)	290	132	219
Colo Rv nr Dotsero(3)	1800	131	1375
Roar. Fk at GlSpr(4)	825	121	692
Wm. Fk nr Par. (5)	80	133	60
Will. Cr. inflow to Will. Cr. Res.	60	130	46
Colo nr Cameo (6)	2880	130	2216

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir.
(2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch.
(3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs.
(4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir.
(5) Observed flow plus diversions through August P. Gumlick Tunnel.
(6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Exc.
Eagle River	Exc.	Exc.
Gypsum Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	158	139
Colorado	21	141	135
Plateau	3	68	97
Roaring Fork	7	106	118
Williams Fork	2	112	129
Willow	2	122	132

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	120	125
Colorado	5	106	118
Roaring Fork	1	169	128
Willow	1	135	135

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	239	239	167
Granby	466	240	264	233
Green Mountain	147	60	71	63
Homestake	43	16	18	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	69	48	--
Williams Fork	97	42	46	27
Willow Creek	9	8	7	6
Vega	32	15	14	11

+ 1953-1967 period.

*This year in percent of avg.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE GOOD ON THE NORTH PLATTE AND NORTHWESTERN COLORADO STREAMS. THE YAMPA AND WHITE ARE BEING FORECAST AT ABOUT 120% OF THE 1953-67 AVERAGE AND THE ELK AT 110%.

FIRST OF APRIL SNOW STORMS DEPOSITED SOME SNOW THAT WAS NOT MEASURED. THIS MIGHT RAISE FORECASTS SOMEWHAT HIGHER.

VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION. MOUNTAIN SOILS INDICATE ABOVE NORMAL SOIL MOISTURE.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
Elk at Clark	210	110*	191
Laramie at Jelm	149	143	104
Little Snake at Lily	415	150	277
No. Platte at Northgate	345	153	225
White nr Meeker	350	119	293
Yampa nr Maybell	1000	117	853
Yampa at Steamboat Springs	315	121	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	3	90	115
Laramie	2	136	128
North Platte	5	117	127
White	2	102	112
Yampa	6	119	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	139	134
North Platte	2	130	105
Yampa	1	97	52

+ 1953-1967 period.

*This year in percent of avg.

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SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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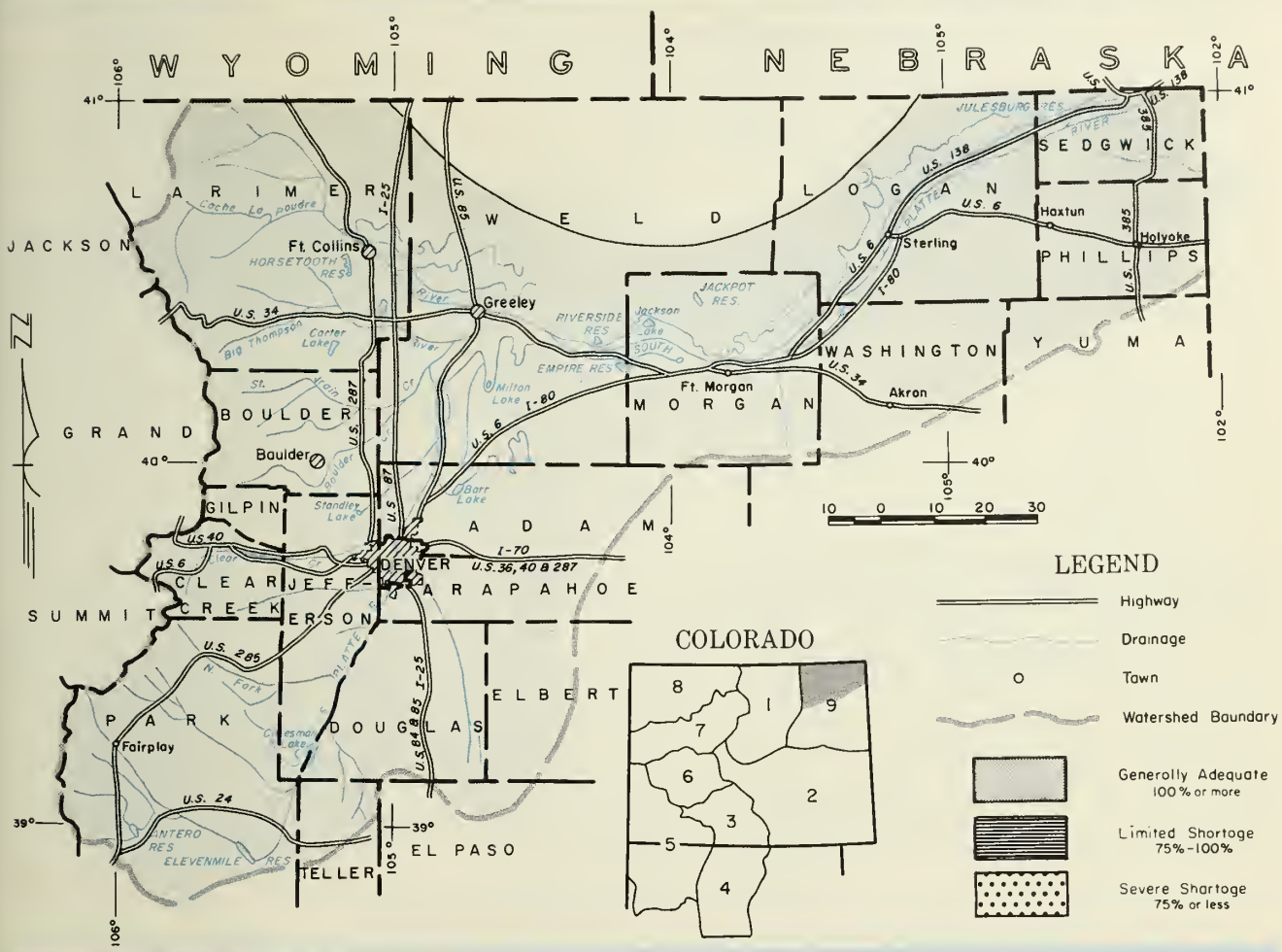
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES SHOULD HAVE EXCELLENT WATER SUPPLIES THIS SUMMER. IN FACT, WATER SUPPLIES COULD BE THE BEST IN THE LAST 10 YEARS. RUNOFF FROM SNOW MELT SHOULD BE WELL ABOVE NORMAL, RESERVOIR STORAGE IS 122% ABOVE NORMAL AND SOIL MOISTURE IS EXCELLENT IN THE PLAINS AS WELL AS THE MOUNTAINS.

FIRST OF THE MONTH SNOW ADDED MATERIALLY TO THE OUTLOOK. FORECASTS RANGE FROM 132% OF NORMAL ON THE BIG THOMPSON TO 147% ON THE CLEAR.

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STERLING, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
		*	
Big Thompson at Drake (1)	132	132	100
Boulder at Orodell	70	143	49
Cache La Poudre at Canon Mouth	290	135	215
Clear Cr. at Golden (2)	175	147	119
Saint Vrain at Lyons (3)	100	143	70

(1) Observed flow plus by-pass to power plants.
(2) Observed flow minus diversions through August P. Gumlick Tunnel.
(3) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley To Fort Morgan	Exc.	Exc.
South Platte from Fort Morgan To Sterling	Exc.	Exc.
South Platte below Sterling	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	165	136
Boulder	3	182	134
Cache La Poudre	6	155	142
Clear Creek	6	175	139
Saint Vrain	2	238	154
South Platte	3	188	149

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	2	137	121
Boulder	2	137	121
Cache La Poudre	2	139	134
Clear Creek	1	153	144
Saint Vrain	3	128	114
South Platte	2	111	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	100.7	91.8	81.7
Cheesman	79.0	79.1	43.2	49.0
Eleven Mile	97.8	96.4	94.6	72.1
Empire	37.7	34.8	32.5	29.6
Horsetooth	143.5	108.4	110.4	106.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	32.7	34.2	34.0
Julesburg	28.2	23.3	20.6	21.5
Prewitt	32.8	28.6	21.2	16.8
Point of Rocks	70.0	70.6	70.6	58.4
Riverside	57.5	60.5	57.5	49.6

+ 1953-1967 period.

*This year in percent of avg.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1970

Snow Course	Date of Survey	Snow Depth Inches	Water Content Inche	Water Content Inches Last Year	Water Content Inches Avg 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman	EST		22.5	NS	16.3
McIntyre	3/27	54	15.3	10.2	10.5
Roach	3/29	80	21.5	16.8	18.2
North Platte River					
Cameron Pass	3/27	88	33.1	29.3	26.5
Columbine Lodge	3/27	81	27.8	22.0	23.5
Northgate	3/27	32	8.5	7.3	6.2
Park View	3/30	48	11.8	10.3	8.6
Willow Cr. Pass(B)	3/30	57	15.9	14.1	12.5
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/30	55	12.2	6.2	5.9
Boulder Falls	4/1	74	18.4	9.9	13.3
University Camp	4/1	85	22.7	13.2	20.7
Big Thompson River					
Deer Ridge	3/26	32	9.4	3.3	5.0
Hidden Valley	3/28	52	13.4	7.0	11.0
Lake Irene (B)	3/30	85	27.4	19.3	20.7
Long's Peak	3/29	51	14.3	8.4	10.7
Two Mile	3/27	65	19.6	13.0	14.5
Cache La Poudre					
Bennett Creek	3/28	47	12.3	7.3	- -
Big South	3/28	10	2.7	0.0	2.4
Cameron Pass	3/27	88	33.1	29.3	26.5
Chambers Lake	3/28	45	14.4	7.4	9.1
Deadman Hill				NS	16.3
Hour Glass Lake	3/28	44	11.6	6.1	6.8
Joe Wright	3/27	87	30.1	22.8	- -
Lost Lake	3/28	53	16.9	7.8	11.5
Pine Creek	3/30	27	3.7	2.7	1.9
Red Feather	NS			6.3	7.2
Clear Creek					
Baltimore (B)	3/30	55	12.2	6.2	5.9
Berthoud Falls	3/31	72	20.4	11.1	12.9
Empire	3/30	44	11.9	5.5	7.5
Grizzly Peak (B)	3/26	76	25.7	15.8	17.9
Loveland Lift	3/27	81	24.5	13.0	23.4
Loveland Pass	3/27	68	20.7	14.2	15.4
Saint Vrain River					
Copeland Lake	3/31	40	7.5	2.3	4.4
Ward	3/30	50	9.6	4.9	6.7
Wild Basin	4/4	61	15.0	5.7	11.8
South Platte River					
Como	3/27	42	11.0	5.0	- -
Geneva Park	3/30	34	7.8	3.0	3.5
Horseshoe Mt.	3/26	54	12.5	8.3	- -
Hoosier Pass	3/30	63	18.0	9.2	12.9
Jefferson Creek	3/27	48	12.3	8.1	9.2
Mosquito	3/26	53	13.8	7.3	- -
Trout Creek Pass	3/26	29	6.1	3.8	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/30	53	10.5	5.4	5.8
Cooper Hill (B)	3/27	57	14.6	9.8	10.6
East Fork	3/26	45	13.3	8.2	9.6
Four Mile Park	3/31	31	8.7	5.6	4.4
Fremont Pass	3/26	64	19.9	13.2	16.1
Garfield	3/30	61	14.4	12.3	13.2
Hermit Lake	NS			- -	- -
Monarch Pass	3/30	71	20.1	16.6	17.3
Tennessee Pass	3/31	57	13.9	9.2	10.1
Twin Lakes Tunnel	3/31	42	11.0	7.6	10.7
Westcliffe	3/30	53	9.8	8.3	5.4
Cucharas River					
Blue Lakes	3/26	22	4.2	NS	2.9
Cucharas Pass	3/26	39	9.0	8.6	- -
LaVeta Pass (B)	3/26	29	7.2	10.4	7.3
Purgatorie River					
Bourbon	EST	42	9.0	7.5	7.1
RIO GRANDE BASIN-Colo					
Alamosa River					
Silver Lakes	3/30	20	3.8	8.6	5.5
Summitville	3/31	70	16.3	19.0	18.1
Conejos River					
Cumbres	3/27	47	13.4	29.4	18.6
Platoro	4/1	64	13.6	19.0	16.6
River Springs	4/1	21	3.1	6.7	4.8
Culebra River					
Brown Cabin	NS			8.5	- -
Cottonwood (B)	NS			9.1	- -
Culebra	NS			11.0	8.4
LaVeta Pass (B)	NS			10.4	7.3
Trinchera (B)	NS			9.2	- -
Rio Grande					
Cochetopa Pass	3/27	38	9.6	5.4	5.1
Grayback	3/25	48	14.0	15.0	- -
Hiway	3/30	72	20.0	28.4	26.0
Lake Humphrey	3/30	24	5.1	7.5	5.5
Love Lake	3/26	33	8.5	10.5	- -
Pass Creek	3/30	30	5.7	14.6	11.1
Pool Table	3/30	28	4.9	5.1	5.9
Porcupine	3/30	40	9.7	10.4	10.1
Santa Maria	3/29	7	1.8	5.3	3.7
Upper Rio Grande	3/29	21	4.3	10.3	6.8
Wolf Creek Pass	3/30	78	20.5	35.2	27.0
Wolf Cr. Sum. (B)	3/30	89	24.7	33.7	28.3
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	3/26	0	0.0	3.0	1.3
Rio Chama					
Bateman	3/30	43	10.5	17.0	11.4
Capulin Peak	3/31	20	3.8	4.5	4.0
Chama Divide	3/28	0	0.0	6.6	1.4
Chamita	3/28	19	5.4	15.1	7.5
Rio Grande					
Aspen Grove	3/30	13	3.2	5.3	3.7
Big Tesuque	3/31	5	1.3	7.3	4.2
Bluebird Mesa	3/31	22	4.8	4.8	3.6
Cordova	3/31	39	8.8	13.3	10.0
Elk Cabin	3/30	5	0.8	3.5	2.1
Fenton Hill	3/31	13	3.7	6.9	2.7
Pajarito Peak	3/30	0	0.0	- -	0.3
Payrole	3/30	39	8.4	13.5	6.2
Quemazon	3/31	41	8.6	10.3	8.2
Rio En Medio	3/31	19	6.6	8.1	7.7
Sandoval	3/31	20	3.9	6.3	4.5
Taos Canyon	3/31	18	2.9	8.5	3.5
Tres Ritos	3/30	13	4.0	7.8	4.2
Rio Hondo					
Twinning	3/31	44	8.9	17.2	- -
Red River					
Hematite Park (B)	3/30	17	3.0	4.7	3.5
Red River	3/30	23	4.8	7.3	5.5

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1970

SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/30	31	7.3	17.7	10.8
Lemon	3/31	26	4.6	15.5	- -
Mineral Creek	3/30	62	15.8	20.3	13.3
Molas Lake	3/30	43	11.7	17.1	12.6
Purgatory	3/30	73	18.5	27.2	- -
Red Mt. Pass (B)	3/30	100	31.5	35.5	30.1
Silverton Sub-Sta.	3/30	20	5.3	10.5	5.1
Spud Mountain	3/30	68	18.6	32.8	23.1
Dolores River					
Lizzard Head	3/30	59	16.4	25.1	16.0
Lone Cone	3/30	69	16.7	20.9	- -
Rico	3/30	20	7.5	16.1	5.4
Telluride	3/31	37	10.2	9.8	5.7
Trout Lake	3/31	49	14.9	19.1	13.2
San Juan River					
Chama Divide (B)	3/28	0	0.0	6.6	1.4
Chamita (B)	3/28	19	5.4	15.1	7.5
Upper San Juan	3/30	81	21.1	39.4	30.8
Wolf Cr. Pass (B)	3/30	78	20.5	35.2	27.0
Wolf Cr. Summit	3/30	89	24.7	33.7	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/31	87	23.6	34.5	21.4
Blue Mesa	3/31	43	10.6	10.6	7.9
Butte	3/31	64	17.5	17.9	- -
Cochetopa Pass(B)	3/27	38	9.6	5.4	5.1
Crested Butte	3/30	52	13.1	16.1	13.3
Keystone	3/26	66	21.5	23.2	19.7
Lake City	3/26	38	9.4	8.4	7.7
Mesa Lakes (B)	3/26	60	18.0	23.9	17.5
McClure Pass	3/27	51	17.3	20.6	14.6
Park Cone	3/29	41	13.3	13.7	10.9
Park Reservoir	3/27	73	21.5	35.5	23.6
Porphyry Creek	3/30	66	18.8	15.4	16.9
Tomichi	3/30	49	14.5	13.9	12.2
Surface Creek					
Alexander Lake	3/31	87	23.6	34.5	21.4
Mesa Lakes (B)	3/26	60	18.0	23.9	17.5
Park Reservoir	3/27	73	21.5	35.5	23.6
Uncompahgre River					
Ironton Park	3/31	56	16.6	16.2	17.9
Red Mountain Pass	3/30	100	31.5	35.5	30.1
Telluride (B)	3/31	37	10.2	9.8	5.7
COLORADO BASIN					
Blue River					
Blue River	3/30	48	12.5	7.8	8.5
Fremont Pass	3/26	64	19.9	13.2	16.1
Frisco	3/26	36	10.6	6.3	7.5
Grizzly Peak	3/26	76	25.7	15.8	17.9
Hoosier Pass (B)	3/30	63	18.0	9.2	12.9
Shrine Pass	3/26	71	23.7	16.7	17.4
Snake River	3/26	42	12.4	8.3	7.6
Summit Ranch	3/31	35	9.6	6.7	7.1
Colorado River					
Arrow	3/27	55	17.7	12.1	11.8
Berthoud Pass	3/25	69	20.3	12.4	14.5
Berthoud Summit	3/31	81	23.6	14.5	19.2
Cooper Hill	3/27	57	14.6	9.8	10.6
Fiddler Gulch	3/28	62	18.4	13.1	15.1
Glenmar Ranch	3/30	37	9.9	8.7	7.9
Gore Pass	3/31	47	13.3	10.6	10.0
Grand Lake	3/29	37	10.5	8.5	8.2
Lake Irene	3/30	85	27.4	19.3	20.7
Lapland	3/26	49	13.6	8.7	9.9
Lulu	3/31	78	27.4	15.2	17.0
Lynx Pass	3/31	53	15.7	13.7	12.0
McKenzie Gulch	3/30	24	5.7	8.0	- -
Middle Fork	3/30	42	12.0	10.9	9.1
Milner	3/30	59	18.5	13.8	13.3
North Inlet	3/28	36	11.2	9.1	8.7
Pando	3/26	42	12.2	11.0	10.4
Phantom Valley	3/30	48	14.9	11.7	10.4
Ranch Creek	3/27	47	13.7	8.6	9.4
Tennessee Pass(B)	3/31	57	13.9	9.2	10.1
Vail Pass	3/27	63	22.2	15.2	17.1
Vasquez	3/25	61	16.7	10.9	12.4
Roaring Fork River					
Aspen	3/29	61	18.0	18.2	16.4
Chapman	3/26	59	17.4	13.5	- -
Independence Pass	3/31	67	23.2	13.9	17.7
Ivanhoe	3/26	69	23.3	17.2	17.9
Kiln	3/26	47	14.1	11.9	- -
Last Chance	3/26	40	11.8	10.3	- -
Lift	3/29	63	17.5	18.1	19.0
McClure Pass	3/27	51	17.3	20.6	14.6
Nast	3/26	29	8.0	7.9	5.3
North Lost Trail	3/27	52	16.6	21.0	14.1
Williams Fork River					
Glenmar Ranch	3/30	37	9.9	8.7	7.9
Jones Pass	3/26	67	22.0	13.6	- -
Middle Fork	3/30	42	12.0	10.9	9.1
Willow Creek					
Granby	3/30	37	10.4	7.5	7.5
Willow Cr. Pass	3/30	57	15.9	14.1	12.5
Plateau Creek					
Mesa Lakes	3/26	60	18.0	23.9	17.5
Park Reservoir	3/27	73	21.5	35.5	23.6
Trickle Divide	3/27	80	24.6	34.5	25.2
YAMPA BASIN					
Elk River					
Clark	3/30	37	10.6	13.5	10.0
Elk River	3/30	63	20.2	20.2	16.8
Hahn's Peak	3/30	46	14.9	17.1	12.9
White River					
Burro Mountain	3/27	61	20.0	19.4	17.0
Rio Blanco	3/26	51	16.6	16.4	15.8
Yampa River					
Bear River	3/31	56	15.1	11.4	11.1
Columbine (B)	3/27	81	27.8	22.0	23.5
Dry Lake	3/26	65	20.8	20.7	19.9
Lynx Pass (B)	3/31	53	15.7	13.7	12.0
Rabbit Ears	3/27	91	31.8	25.5	25.7
Yampa View	3/27	53	18.1	15.3	14.3

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	3/30	11.1	4.8	3.9	6.4
Willow Pass	3/30	9.5	8.[illegible]	6.3	6.3
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	NS	6.9		3.2	3.4
Big Thompson River					
Beaver Dam	NS	7.1		3.2	3.3
Guard Station	3/29	6.9	3.2	2.9	3.6
Two Mile	NS	4.9		3.0	2.6
Clear Creek					
Clear Creek	3/27	9.5	7.2	4.7	5.0
Hoop Creek	NS	4.9		3.0	2.6
Cache La Poudre River					
Feather	3/26	10.1	7.3	4.2	4.0
Laramie Road	3/28	12.4	7.2	6.2	6.8
South Platte River					
Hoosier Pass	3/30	7.8	4.9	4.4	4.3
Kenosha Pass	3/27	4.4	2.3	2.1	2.0
ARKANSAS BASIN					
Arkansas River					
Garfield	3/30	6.7	4.1	2.5	3.5
Leadville	3/26	7.8	3.1	3.2	3.7
Twin Lakes Tunnel	3/26	4.5	1.8	1.0	2.5
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	3/23	10.7	5.9	9.0	6.0
Rio Grande					
Alberta Park	3/31	8.2	5.1	5.7	4.7
Bristol View	3/26	6.1	3.2	2.6	3.4
LaVeta Pass	3/23	11.9	8.2	10.7	8.7
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	3/30	6.7	2.5	- -	3.2
Chamita	NS	8.0		4.3	4.1
Rio Grande					
Aqua Piedra	3/30	7.2	5.6	2.7	3.7
Big Tesuque	3/31	3.7	1.9	2.0	1.9
Fenton Hill		6.5	NS		5.1
Rio En Medio	3/31	3.5	1.4	1.8	1.2
Taos Canyon	3/30	3.3	2.4	2.0	2.3
Red River					
Red Summit	3/30	4.9	0.6	1.6	1.9
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	3/30	9.1	3.9	3.6	6.9
Mineral Creek	3/30	5.7	2.6	2.2	3.5
Molas Lake	3/30	9.4	4.2	5.3	4.4
Dolores River					
Dolores	3/30	19.6	7.8	2.4	8.0
Lizzard Head	3/30	11.8	3.4	3.1	7.1
Rico	3/30	13.8	10.4	5.7	8.3

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVE. ALL DATA
GUNNISON BASIN					
Gunnison River					
King	3/30	3.3	2.3	1.5	1.9
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	3/30	4.2	3.0	2.5	2.4
Colorado River					
Berthoud Pass	3/25	3.9	3.2	1.7	2.5
Gore	3/31	4.9	3.3	2.5	2.6
Grand Mesa	3/27	12.5	9.6	9.0	9.0
Ranch Creek	3/27	8.7	6.1	4.9	5.3
Vail	3/26	12.3	8.4	10.7	6.5
Roaring Fork River					
Placita	3/26	9.3	8.3	4.9	6.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	3/30	19.0	5.9	6.1	11.4

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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SPECIAL SNOW SURVEY INFORMATION

April 15, 1970

Water Supply Outlook
Federal-State-Private-Cooperative Snow Surveys

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Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

SNOW COURSES	Current Information: Date of Survey	Snow Depth Inches	Water Content Inches	1970 Apr. 1 Reading	Past Record: Water Content in Inches: Apr. 1 1953-67 Avg.	May 1 1953-67 Avg.
North Platte Basin						
Cameron Pass	4/14	93	33.8	33.1	26.5	28.4
Columbine Lodge	4/15	77	27.6	27.8	23.5	21.4
Northgate	4/13	32	9.0	8.5	6.2	2.7
Willow Creek Pass	4/13	53	17.3	15.9	12.5	10.0
South Platte Basin						
Boulder Falls	4/12	60	19.8	18.4	13.3	11.9
Cameron Pass	4/14	93	33.8	33.1	26.5	28.4
Copeland Lake	4/15	24	8.5	7.5	4.4	1.7
Joe Wright	4/14	94	33.2	30.1	- -	- -
Red Feather	4/10	35	10.9	- -	7.2	4.4
University Camp	4/12	75	27.0	22.7	20.7	20.7
Ward	4/15	38	11.3	9.6	6.7	5.4
Arkansas Basin						
Fremont Pass	4/13	67	21.3	19.9	16.1	17.9
Porphyry (B)	4/13	61	19.8	18.8	16.9	16.5
Rio Grande Basin (Colo.)						
Culebra	4/13	34	10.6	8.3	8.4	3.5
Lake Humphrey	4/15	14	3.7	5.1	5.5	0.4
Pass Creek	4/13	20	7.5	5.7	11.1	3.9
Pool Table	4/15	25	5.8	4.9	5.9	1.9
Porcupine	4/14	39	8.8	9.7	10.1	6.6
Santa Maria	4/13	4	1.0	1.8	3.7	0.5
Upper Rio Grande	4/15	17	4.2	4.3	6.8	1.8
Wolf Creek Pass	4/13	66	23.0	20.5	27.0	22.0
Wolf Creek Sum.	4/13	80	26.9	24.7	28.0	30.0

SNOW COURSES	Current Information: Date of Survey	Snow Depth Inches	Water Content Inches	1970 Apr. 1 Reading	Past Record: Water Content in Inches: Apr. 1 1953-67 Avg.	May 1953-67 Avg.
San Juan-Dolores Basin						
Cascade	4/13	18	5.9	7.3	10.8	3.6
Mineral Creek	4/13	52	16.3	15.8	14.6	10.5
Molas Lake	4/13	36	11.4	11.7	12.6	6.8
Red Mountain	4/13	89	34.2	31.5	30.1	30.3
Silverton Sub	4/13	8	2.6	5.3	5.1	0.1
Spud Mountain	4/13	56	18.3	18.6	23.1	22.2
Upper San Juan	4/13	68	23.7	21.1	30.8	26.6
Wolf Creek Pass (B)	4/13	66	23.0	20.5	27.0	22.0
Wolf Creek Sum.	4/13	80	26.9	24.7	28.0	30.0
Gunnison Basin						
Alexander Lake	4/14	73	25.2	23.6	21.4	21.0
Crested Butte	4/13	44	12.3	13.1	13.3	7.1
Ironton Park	4/13	50	13.0	16.6	12.0	6.7
McClure Pass	4/14	48	17.0	17.3	14.6	9.3
Porphyry	4/13	61	19.8	18.8	16.9	16.5
Red Mountain	4/13	89	34.2	31.5	30.1	30.3
Colorado Basin (Main)						
Fremont Pass	4/13	67	21.3	19.9	16.1	17.9
Frisco	4/13	36	11.3	10.6	7.5	4.6
Lake Irene	4/15	87	30.6	27.4	20.7	22.4
Lynx Pass	4/14	48	15.2	15.7	12.0	7.1
McClure	4/14	48	17.0	17.3	14.6	9.3
Milner Pass	4/15	58	18.6	18.5	13.3	12.0
North Lost Trail	4/14	52	16.6	16.6	14.1	7.5
Phantom Valley	4/15	45	15.1	14.9	10.4	6.2
Willow Creek Pass Pass	4/13	53	17.3	15.9	12.5	10.0
Yampa-White Basin						
Burro Mountain	4/15	59	20.4	20.0	17.0	14.5
Dry Lake	4/16	59	21.1	20.8	19.9	15.2
Rabbit Ears	4/15	87	31.6	31.8	25.7	25.9
Yampa View	4/15	47	16.0	18.1	14.3	8.4

(B) - On adjacent drainages

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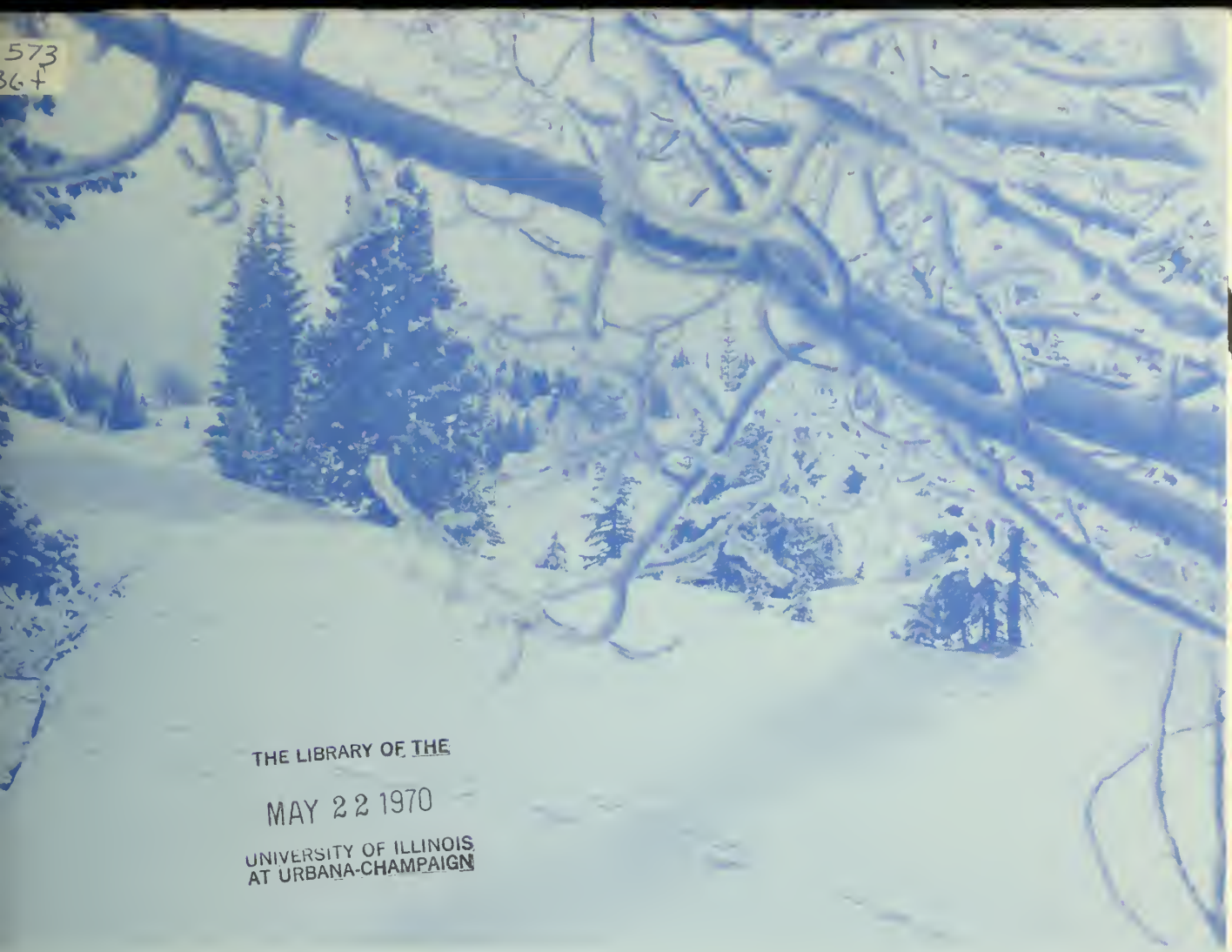

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAY 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snaw depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are obout 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivolent at key locations.

Detailed data on snaw course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents o broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states obout every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Canservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with stote water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservotion Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, Colifornia 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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SOIL CONSERVATION SERVICE
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COLORADO STATE UNIVERSITY
FT. COLLINS, COLORADO 80521

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarran, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

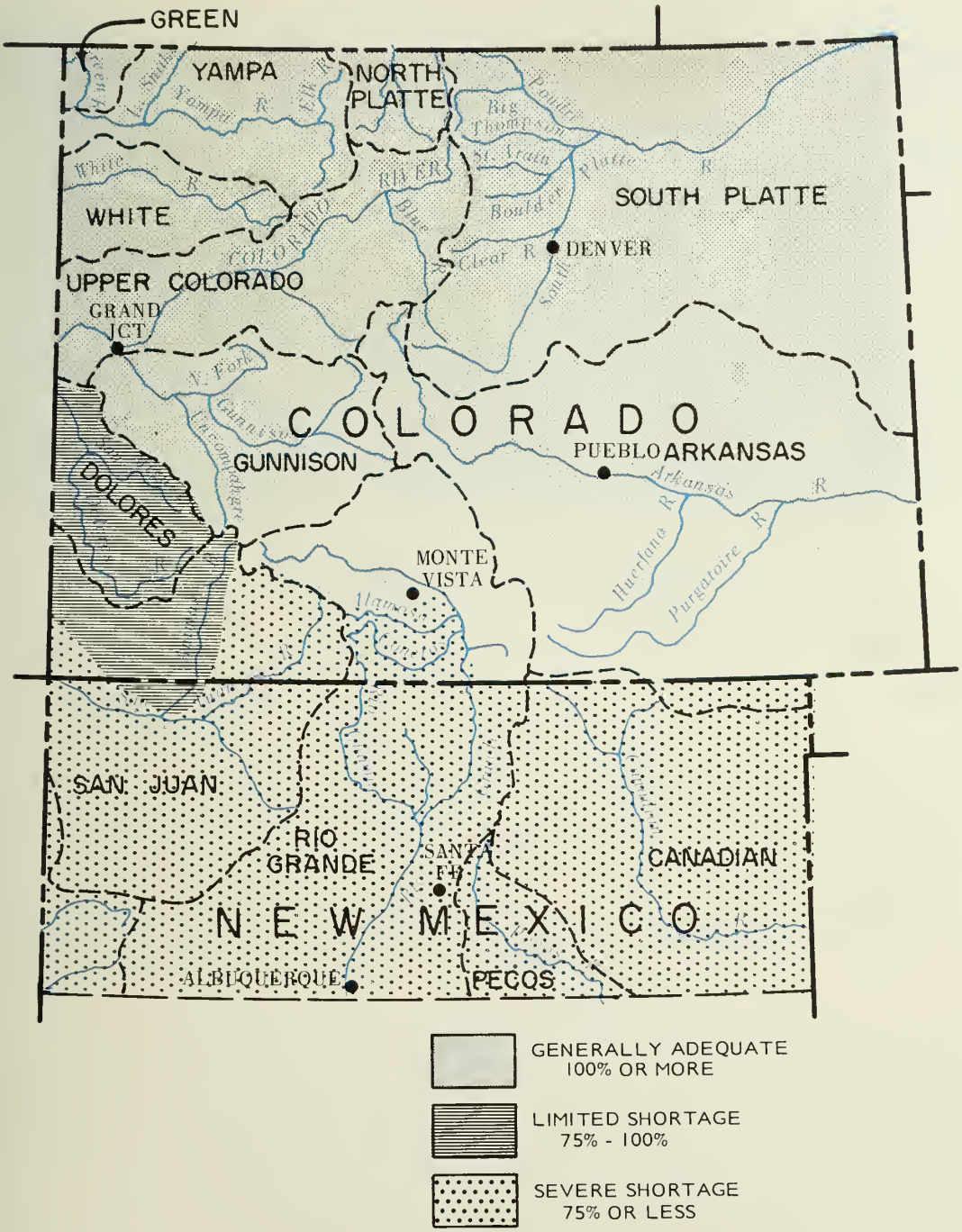
APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

May 1, 1970



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SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

May 1, 1970

APRIL SNOWS FOLLOWED THE SAME PATTERN AS PREVIOUS MONTHS. THE NORTHERN HALF OF COLORADO HAD ABOVE NORMAL SNOW WHILE THE SOUTHERN HALF AND NEW MEXICO HAD NORMAL TO BELOW SNOWFALL.

FORECASTS WERE RAISED 10% TO 20% IN THE NORTH AND REMAINED ABOUT THE SAME AS FORECAST APRIL 1st IN THE SOUTH.

SOME HIGH WATER CAN BE EXPECTED IN THE SOUTH PLATTE DRAINAGE. ALL THE RESERVOIRS ARE NEARLY FULL AND RIVER FLOW FORECASTS RANGE ABOVE 140%.

IF TEMPERATURES REMAIN LOW AND THERE IS NO EXCESSIVE RAINFALL, NO MAJOR DAMAGE IS EXPECTED.

SOIL MOISTURE THROUGHOUT COLORADO IS EXCELLENT. NEW MEXICO REPORTS FAIR TO POOR SOIL MOISTURE CONDITIONS.

COLORADO -- COLORADO SHOULD HAVE AN EXCELLENT WATER SUPPLY THIS SUMMER. THE ONLY TWO AREAS THAT WILL HAVE SOME SHORTAGE ARE THE RIO GRANDE AND SAN JUAN DRAINAGES. SHORTAGE HERE SHOULD NOT BE SEVERE. THE REST OF THE STATE'S STREAMS SHOULD FLOW CONSIDERABLY ABOVE NORMAL. THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES MAY HAVE MORE WATER THAN THEY CAN HANDLE. SOME HIGH WATER IS EXPECTED IN THIS AREA. OTHER MAJOR STREAMS ARE EXPECTED TO FLOW ABOVE NORMAL, BUT NO HIGH FLOW PROBLEMS ARE EXPECTED. RESERVOIR STORAGE IS GOOD. SOIL MOISTURE CONDITIONS ARE REPORTED AS EXCELLENT.

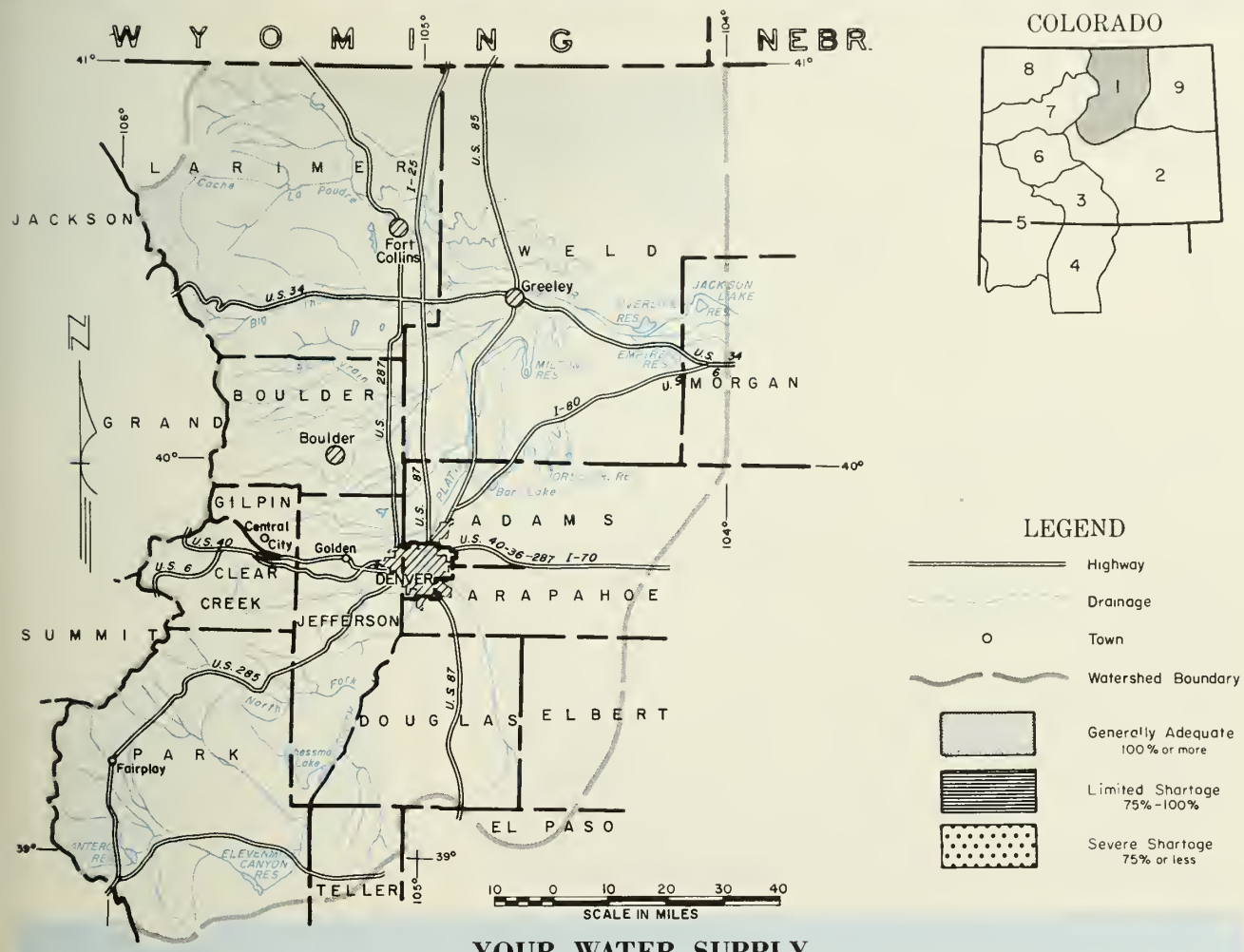
NEW MEXICO -- SOME WATER SHORTAGE IS EXPECTED IN NEW MEXICO THIS SUMMER. THE RIO GRANDE SHOULD FLOW ABOUT 70% OF NORMAL. THE SAN JUAN SHOULD ALSO HAVE SUMMER FLOWS WELL BELOW NORMAL. THE SNOW PACK DID NOT IMPROVE DURING APRIL. ALL BUT THE VERY HIGH ELEVATION SNOW HAS ALREADY DISAPPEARED. SOIL MOISTURE CONDITIONS ARE ONLY FAIR. SOME WATER MAY BE NEEDED TO IRRIGATE UP CROPS. CARRY-OVER STORAGE IS BETTER THAN NORMAL AND WILL BE AN EXCELLENT SUPPLEMENT. UNLESS SUMMER RAINFALL IS ABOVE NORMAL LATE SEASON FLOWS WILL BE VERY LOW.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK ON THE SOUTH PLATTE AND ITS TRIBUTARIES IS NEAR THE MAXIMUM OF RECORD. SOME SNOW COURSES HAVE ABOVE MAXIMUM SNOW AS OF MAY 1st.

WATER SUPPLIES SHOULD BE EXCELLENT. THERE IS A GOOD CHANCE FOR HIGH WATER OVER THE ENTIRE BASIN. MUCH WILL DEPEND UPON SPRING TEMPERATURES AND RAINFALL.

LOW AREAS ALONG RIVER CHANNELS CAN EXPECT SOME HIGH WATER THROUGH JUNE AND INTO EARLY JULY.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Big Thompson at Drake (1)	140	140	100
Boulder at Orodell	78	159	49
Cache La Poudre at Canon Mouth (2)	300	140	215
Cl. Cr. at Golden(3)	200	168	119
St. Vrain at Lyons(4)	115	164	70

(1) Observed flow minus by-pass to power plants.
(2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(3) Observed flow minus diversion through August P. Gumlick Tunnel.
(4) Observed flow minus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Exc.
Coal Creek	Exc.	Exc.
North Fork of South Platte	Exc.	Exc.
North Fork of Cache La Poudre	Exc.	Exc.
Ralston Creek	Exc.	Exc.
Rock Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	221	156
Boulder	3	296	172
Cache La Poudre	8	205	165
Clear Creek	5	248	157
Saint Vrain	3	428	168
South Platte	3	305	202

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	93	108
Boulder	1	121	93
Cache La Poudre	2	81	92
Clear Creek	1	118	130
Saint Vrain	2	97	103
South Platte	2	88	89

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	28.0	27.8	23.0
Black Hollow	8.0	4.0	3.5	3.5
Boyd Lake	44.0	41.3	38.9	27.7
Cache La Poudre	9.5	8.9	8.5	8.0
Carter Lake	108.9	104.5	90.8	86.4
Chambers Lake	8.8	3.4	2.5	3.3
Cheesman	79.0	79.1	49.6	50.2
Cobb Lake	34.0	18.5	14.7	9.8
Eleven Mile	97.8	96.4	94.6	72.9
Fossil Creek	11.6	10.3	8.4	7.0
Gross	43.1	36.7	30.0	17.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6.4	3.0	6.4	5.6
Horsetooth	143.5	123.6	116.8	116.9
Lake Loveland	14.3	10.4	5.8	9.0
Lone Tree	9.2	8.1	4.4	7.9
Mariano	5.4	5.1	5.6	2.0
Marshall	10.3	8.5	3.6	4.0
Marston	18.0	16.6	15.4	15.5
Milton	24.4	16.0	17.4	11.0
Standley	42.0	37.2	18.2	11.9
Terry Lake	8.2	6.1	4.5	5.3
Union	12.7	12.7	3.3	8.0
Windsor	18.6	14.3	11.5	14.7

+ 1953-1967 period.

*This year in percent of avg.

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FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

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FIRST CLASS MAIL

CO-1b

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

SNOW PACK DURING APRIL CONTINUED TO IMPROVE. THE PACK IS NOW 165% OF THE 1953-67 AVERAGE. AN EXCELLENT WATER YEAR IS IN PROSPECT. SOIL MOISTURE IS GOOD IN THE IRRIGATED AREAS AS WELL AS THE MOUNTAINS.

THE APRIL-SEPTEMBER FLOW SHOULD BE 130% OF NORMAL. RESERVOIR STORAGE IS ABOVE NORMAL. HIGH WATER MAY OCCUR IN SOME AREAS IF TEMPERATURES SHOULD REMAIN HIGH OR SPRING RAINS ARE ABOVE NORMAL.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Arkansas nr Pueblo (1)	440	148	298
Ark. at Salida (1)	400	129	309
Cucharas nr LaVeta	14	117	12
Purgatoire at Trinidad	70	152	46

(1) Observed flow plus change in Clear Creek, Twin Lakes, and Turquoise Reservoirs minus diversions through Busk-Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable Creek	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	237	166
Cucharas and Purgatoire	3	---	321

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	92	73
Cucharas and Purgatoire	1	101	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	17.3	0.0	10.6
Clear Creek	11.4	10.1	8.1	6.4
Cucharas	40.0	1.8	0.7	4.8
Great Plains	150.0	114.9	11.5	35.9
Horse Creek	26.9	19.7	0.0	4.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	57.0	24.7	67.9
Meredith	41.9	24.8	0.0	9.3
Model	15.0	2.4	1.5	2.4
Turquoise	130.0	42.8	35.5	6.2
Twin Lakes	57.9	37.3	27.2	17.7

+ 1953-1967 period.

*This year in percent of avg.

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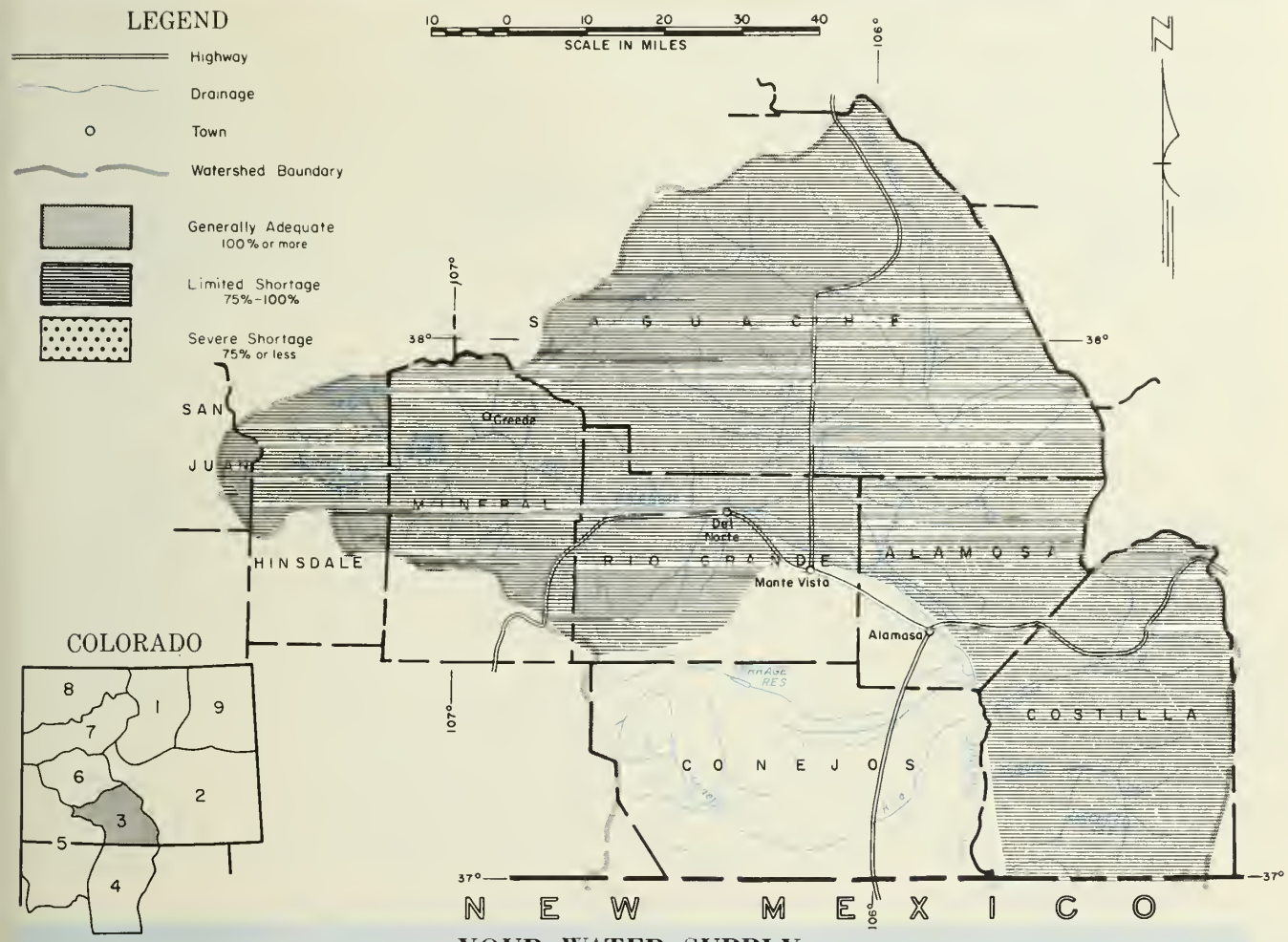
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK IMPROVED ONLY SLIGHTLY DURING APRIL. THERE IS EXPECTED TO BE SOME WATER SHORTAGE THIS SUMMER. THE SNOW PACK ON THE RIO GRANDE IS JUST ABOUT NORMAL, HOWEVER, FORECASTS ARE FOR ABOUT 85% OF NORMAL RUNOFF. THE SANGRE DE CRISTO MOUNTAINS HAVE A SMALL AREA OF FAIRLY HEAVY SNOW ABOVE SAN LUIS. CULEBRA CREEK SHOULD FLOW ABOVE NORMAL. SOIL MOISTURE IS EXCELLENT AND SHOULD REDUCE WATER DEMANDS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]	Average +
		*	
Alamosa abv Terrace	43	69	62
Conejos nr Mogote(1)	125	69	182
Culebra at San Luis (2)	25	131	19
Rio Gr. at 30 Mile Bridge (3)	100	85	117
Rio Gr. nr Del Norte (3)	370	85	438
So. Fk. at So. Fk.	85	77	110

(1) Observed flow plus change in storage in Platoro Reservoir.
(2) Observed flow plus change in storage in Sanchez Reservoir.
(3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Poor
Sangre de Cristo Cr.	Avg.	Poor
Trinchera	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	106	103
Conejos	3	76	117
Culebra	2	262	222
Rio Grande	10	103	101

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	92	92
Conejos	1	82	82
Culebra	1	101	99
Rio Grande	3	97	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	6.9	7.2	5.8
Platoro	60.0	4.0	4.6	8.1
Rio Grande	45.8	29.4	23.3	15.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	20.0	12.7	12.3
Santa Maria	45.0	6.9	4.7	6.9
Terrace	17.7	9.9	9.9	5.7

+ 1953-1967 period.

*This year in percent of avg.

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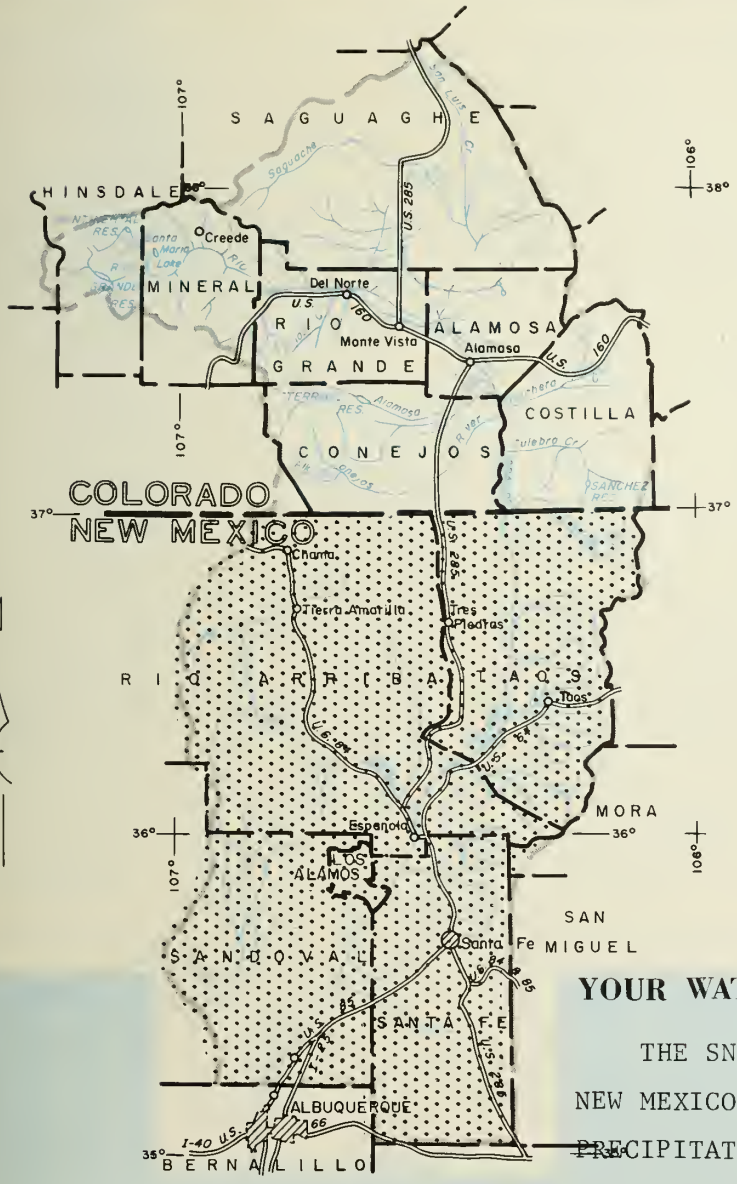
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

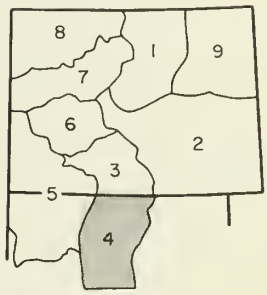
as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



COLORADO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW HAS ALL BUT VANISHED IN NEW MEXICO EXCEPT ON THE VERY HIGH PEAKS. PRECIPITATION OVER NORTHERN NEW MEXICO WAS BELOW NORMAL DURING APRIL. STREAMS ARE EXPECTED TO FLOW CONSIDERABLY BELOW NORMAL. WATER SHORTAGES WILL EXIST, ESPECIALLY DURING THE LATER PART OF THE IRRIGATION SEASON. SOIL MOISTURE IS REPORTED AS FAIR TO POOR.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted]*	Average+
Costilla at Cost.(1)	15	83	18
Pecos at Pecos	25	61	41
Rio Chama to ElVado	135	72	188
Rio Gr. at Otowi(2)	370	72	513
Rio Gr. at San Mar(2)	200	60	334
Rio Hondo nr Valdez	12	80	15
Red R. at Mouth nr Questa	22	70	32

The forecast of the Rio Grande at San Marcial is 31% of the Average used by the Elephant Butte Irrigation District.
(1) Observed flow plus change in Costilla Reservoir.
(2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Poor
Jemez River	Avg.	Poor
Mora River	Avg.	Poor
Nambe Creek	Avg.	Poor
Rio Ojo Caliante	Avg.	Poor
Rio Pueblo de Taos	Avg.	Poor
Santa Fe Creek	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average+
No snow measurements scheduled this month.			

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average+
No soil moisture readings scheduled this month.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average+
Alamorgordo	111	85	32	64
Caballo	344	53	55	75
Conchas	273	233	111	150
Elephant Butte	2195	479	353	322

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average+
ElVado	195	8	4	31
McMillen-Avalon	32	12	21	12

+ 1953-1967 period.

*This year in percent of avg.

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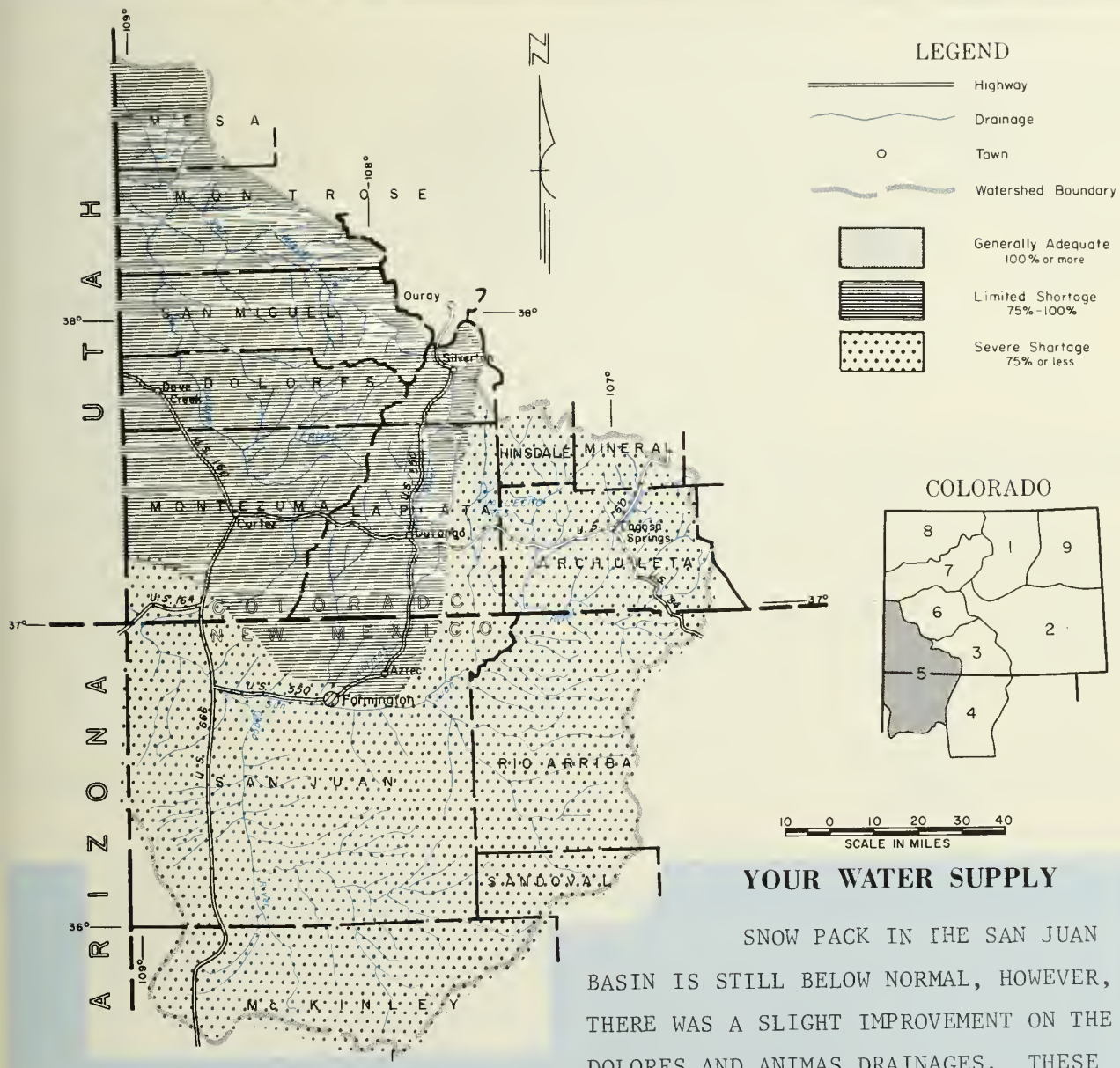
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER SHEDS IN COLORADO AND NEW MEXICO

as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

SNOW PACK IN THE SAN JUAN BASIN IS STILL BELOW NORMAL, HOWEVER, THERE WAS A SLIGHT IMPROVEMENT ON THE DOLORES AND ANIMAS DRAINAGES. THESE TWO STREAMS SHOULD HAVE NEAR NORMAL FLOWS. THE REMAINDER OF THE STREAMS IN THE BASIN SHOULD FLOW ABOUT 70% OF THE 1953-67 AVERAGE.

SOIL MOISTURE IS GOOD AND RESERVOIR CARRY-OVER STORAGE IS ABOVE NORMAL.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] % Flow	Average +
Animas at Durango	375	92	409
Dolores at Dolores	210	91	231
La Plata at Hesperus	17	71	24
Los Pinos at Bayfield (1)	140	72	194
Piedra Cr. at Piedra	118	72	163
San Juan at Carracas	265	70	379
Inflow to Navajo Res. (1) (Apr-Jul)	420	68	619

(1) Observed flou plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Avg.
Mancos	Exc.	Avg.
San Miguel	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	99	122
Dolores	4	127	175
San Juan	3	83	91

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	90	70
Dolores	3	87	87
San Juan	2	81	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	14	14	9
Lemon	40	32	19	19
Navajo	1036	876	895	326
Vallecito	126	83	95	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

*This year in percent of avg.

+ 1953-1967 period.

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OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE INCREASED THIS MONTH. THE GUNNISON RIVER WAS INCREASED CONSIDERABLY WHILE THE UNCOMPAHGRE AND SURFACE CREEK WERE RAISED SLIGHTLY. ADEQUATE WATER SUPPLIES SHOULD BE AVAILABLE THIS SUMMER. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

SOIL MOISTURE CONDITIONS ARE GOOD IN THE IRRIGATED AND MOUNTAIN SOILS.

RESERVOIR STORAGE IS GOOD WITH 115% OF LAST YEAR'S STORAGE.

This report prepared by

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FORT COLLINS, COLORADO

Issued by

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DENVER, COLORADO

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GRAND JUNCTION, COLORADO

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	[redacted]	Last Years Flow	Average +
Gunnison nr Gr. Junction (1)	1675	147	1137
Surface Cr. nr Cedaridge	18	113	16
Uncompahgre at Colona	140	109	129

(1) Observed flow plus change in storage in Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Exc.
Taylor	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	150	142
Surface Creek	3	107	125
Uncompahgre	3	178	157

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	100	100
Surface Creek	1	90	117
Uncompahgre	1	90	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	425	362	--
Morrow Point	121	117	109	--
Taylor	106	54	46	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

*This year in percent of avg.

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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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FIRST CLASS MAIL

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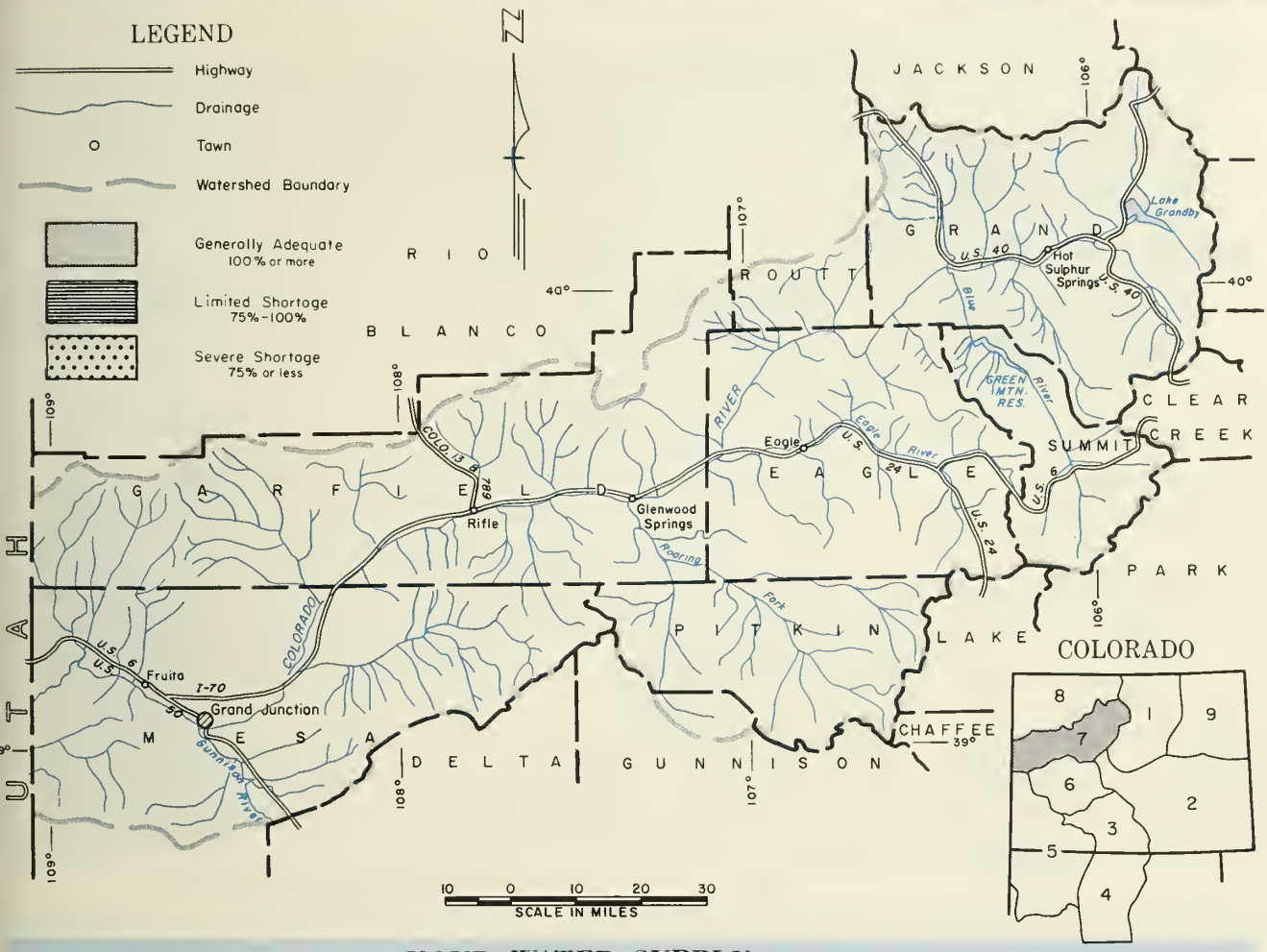
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW PACK IS MUCH ABOVE AVERAGE BECAUSE OF ABOVE AVERAGE SNOWFALL AND BELOW AVERAGE TEMPERATURES. ALL STREAMFLOW FORECASTS HAVE BEEN INCREASED. MOST STREAMS ARE FORECAST AT ABOUT 140% OF AVERAGE WITH THE EXCEPTION OF WILLIAMS RIVER AND WILLOW CREEK WHICH ARE ABOUT 175%.

SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD IN THE IRRIGATED AREAS. MOUNTAIN SOIL MOISTURE IS ABOVE AVERAGE.

STREAMFLOW FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average †
Blue ab Gr. Mt. (1)	345	146	236
Colo. Rv inflow to Granby Res. (2)	300	137	219
Colo. Rv nr Dots. (3)	1950	142	1375
Roar. Fk at GlSpr. (4)	950	137	692
Wm. Fk nr Par. (5)	105	175	60
Will. Cr. inflow to Will. Cr. Res.	80	174	46
Colo. nr Cameo (6)	3200	144	2216

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir.
(2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch.
(3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs.
(4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir.
(5) Observed flow plus diversions through August P. Gumlick Tunnel.
(6) Observed flow plus the changes as indicated in (3) and (4).

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Blue River	8	238	165
Colorado	22	233	170
Plateau	3	103	119
Roaring Fork	7	206	158
Williams Fork	3	306	175
Willow	2	221	196

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Blue River	1	118	110
Colorado	5	97	103
Roaring Fork	1	125	107
Willow	1	129	127

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Dillon	254	239	228	223
Granby	466	226	142	205
Green Mountain	147	37	59	43
Homestake	43	14	7	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Ruedi	101	54	57	--
Vega	32	16	17	13
Williams Fork	97	39	30	34
Willow Creek	9	9	7	--

† 1953-1967 period.

*This year in percent of avg.

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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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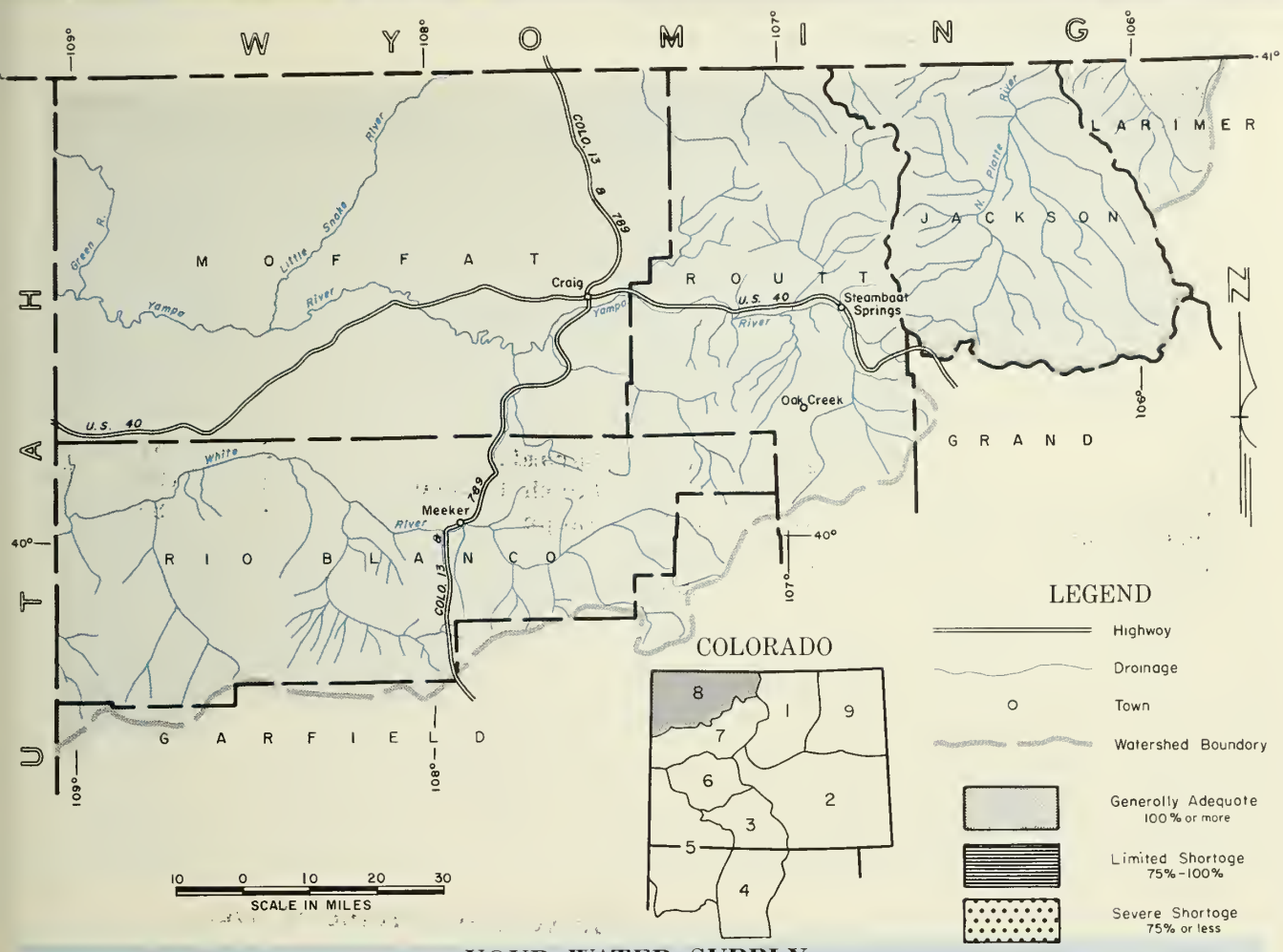
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES WILL BE EXCELLENT THIS SUMMER. THE SNOW PACK IS APPROACHING THE MAXIMUM OF RECORD. THE DEEPEST SNOW EVER MEASURED BY THE SOIL CONSERVATION SERVICE OCCURRED NEAR STEAMBOAT SPRINGS ON BUFFALO PASS.

ALL STREAMS IN THIS BASIN ARE FORECASTED MUCH ABOVE NORMAL. VALLEY SOILS ARE IN EXCELLENT CONDITION AND MOUNTAIN SOILS CONTAIN MORE MOISTURE THAN NORMAL.

This report prepared by
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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average +
Elk at Clark	237	124	191
Laramie at Jelm	154	148	104
Little Snake at Lily	465	168	277
No. Platte at Northgate	370	164	225
White nr Meeker	380	130	293
Yampa nr Maybell	1200	141	853
Yampa at Steamboat Springs	370	142	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	3	201	180
Laramie	3	183	136
North Platte	5	165	157
White	2	239	166
Yampa	6	228	163

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	81	92
North Platte	2	105	104
Yampa	1	82	52

+ 1953-1967 period.

*This year in percent of avg.

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FORT COLLINS, COLORADO 80521

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IS ONE OF THE BEST ON RECORD. ALL STREAMS ARE EXPECTED TO FLOW MUCH ABOVE NORMAL. HIGH WATER CAN BE ANTICIPATED THROUGH JUNE. RESERVOIRS ARE NEARLY ALL FULL. SOIL MOISTURE IS EXCELLENT IN THE IRRIGATED AS WELL AS DRY LAND.

FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE ENTIRE FORECAST PERIOD. ABOVE NORMAL PRECIPITATION COULD CAUSE PROBLEMS IN LOW AREAS ALONG RIVER CHANNELS.

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STERLING, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	[redacted] *	Average †
Big Thompson at Drake (1)	140	140	100
Boulder at Orodell	78	159	49
Cache La Poudre at Canon Mouth (2)	300	140	215
Clear Cr. at Golden (3)	200	168	119
Saint Vrain at Lyons (4)	115	164	70

(1) Observed flow plus by-pass to power plants.
(2) Observed flow minus diversions through August P. Gumlick Tunnel.
(3) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	221	156
Boulder	3	296	172
Cache La Poudre	8	205	165
Clear Creek	5	248	157
Saint Vrain	3	428	168
South Platte	3	305	202

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	93	108
Boulder	1	121	93
Cache La Poudre	2	81	92
Clear Creek	1	118	130
Saint Vrain	2	97	103
South Platte	2	88	89

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Carter	108.9	104.5	90.8	86.4
Cheesman	79.0	79.1	49.6	50.2
Eleven Mile	97.8	96.4	94.6	72.9
Empire	37.7	33.9	33.3	29.0
Horsetooth	143.5	123.6	116.8	116.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Jackson	35.4	34.4	34.4	33.7
Julesburg	28.2	23.6	20.8	22.1
Prewitt	32.8	26.8	23.7	17.5
Point of Rocks	70.0	70.3	69.8	60.8
Riverside	57.5	60.5	57.2	51.0

*This year in percent of avg.

† 1953-1967 period.

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FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

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APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1970

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman	5/1	73	26.1	10.5	17.1
McIntyre	4/25	50	15.2	9.4	9.4
Roach	4/26	78	20.0	13.6	18.7
North Platte River					
Cameron Pass	4/27	94	37.8	31.8	28.4
Columbine Lodge	4/29	77	30.4	15.0	21.4
Norghgate	4/27	28	9.3	1.2	2.7
Park View	4/28	39	13.0	6.0	5.6
Willow Cr. Pass(B)	4/28	50	16.5	11.0	10.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/29	39	12.5	0.6	2.9
Boulder Falls	4/29	58	19.6	7.5	11.9
University Camp	4/29	75	28.9	12.5	20.7
Big Thompson River					
Deer Ridge	4/28	31	9.4	0.0	2.6
Hidden Valley	4/28	58	16.8	5.6	12.0
Lake Irene (B)	4/28	83	31.1	17.1	22.4
Long's Peak	5/2	62	19.4	8.9	12.0
Two Mile	4/29	77	25.8	14.7	17.0
Cache La Poudre					
Bennett Creek	4/28	36	11.5	0.6	- -
Big South	5/3	1	0.4	0.3	0.6
Cameron Pass	4/27	94	37.8	31.8	28.4
Chambers Lake	5/3	28	12.5	3.4	5.3
Deadman Hill	5/1	73	26.1	10.5	17.1
Hour Glass Lake	4/28	37	12.1	3.0	5.6
Joe Wright	4/27	92	35.8	23.8	- -
Lost Lake	5/3	46	17.4	6.2	8.9
Pine Creek	4/28	3	1.0	0.0	0.1
Red Feather	4/28	30	8.9	1.6	4.4
Clear Creek					
Berthoud Falls	4/29	39	22.5	6.3	12.1
Empire	4/29	43	14.1	4.2	6.8
Grizzly Peak (B)	4/28	76	29.5	14.2	19.4
Loveland Lift	4/29	86	29.9	17.7	25.3
Loveland Pass	4/29	68	26.9	7.1	14.5
Saint Vrain River					
Copeland Lake	4/28	19	5.7	0.5	1.7
Ward	4/28	37	10.8	1.3	5.4
Wild Basin	4/28	59	16.0	5.8	12.2
South Platte River					
Como	4/28	45	13.5	2.2	- -
Geneva Park	4/23	31	8.0	0.1	1.2
Horseshoe Mt.	4/27	55	17.0	7.0	- -
Hoosier Pass	4/29	60	17.5	9.4	12.0
Jefferson Creek	4/28	53	15.5	3.9	7.1
Mosquito	4/28	55	16.2	0.7	- -
Trout Creek Pass	4/27	28	6.4	0.0	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/28	29	8.6	0.0	2.2
Cooper Hill (B)	4/28	58	17.1	10.2	11.1
East Fork	4/28	38	12.2	3.4	7.4
Four Mile Park	4/30	22	7.2	0.0	1.0
Fremont Pass	4/28	67	22.8	14.7	17.9
Garfield	4/29	45	14.6	5.9	8.5
Monarch Pass	4/29	62	20.9	12.3	16.5
Tennessee Pass	4/30	52	13.0	5.7	7.7
Twin Lakes Tunnel	4/29	44	12.2	5.5	8.7
Westcliffe	4/28	24	7.9	0.0	1.0
Cucharas River					
Blue Lakes	4/28	2	0.6	NS	0.5
Cucharas Pass	4/28	28	10.0	0.0	- -
LaVeta Pass (B)	4/28	15	4.3	0.0	1.6
Purgatoire River					
Bourbon	4/29	25	7.3	0.0	1.7
RIO GRANDE BASIN-Colo					
Alamosa River					
Silver Lakes	4/28	2	0.6	0.0	0.6
Summitville	4/24	67	19.6	19.0	19.0
Conejos River					
Cumbres	4/30	44	15.2	22.6	12.6
Platoro	4/27	41	11.6	12.7	9.9
River Springs	4/28	0	0.0	0.0	0.5
Culebra River					
Brown Cabin	5/3	8	1.9	0.0	- -
Cottonwood (B)					
Culebra	4/28	23	7.0	4.3	3.5
LaVeta Pass (B)	4/28	15	4.3	0.0	1.6
Trinchera (B)	5/2	41	9.6	4.7	- -
Rio Grande					
Cochetopa Pass	4/28	32	7.7	2.1	2.6
Grayback	4/24	50	16.6	13.6	- -
Hiway	4/28	74	23.4	27.6	28.1
Lake Humphrey	4/29	3	0.8	0.7	0.4
Love Lake	4/24	35	9.8	3.4	- -
Pass Creek	4/28	16	5.2	0.0	3.9
Pool Table	4/29	17	4.1	1.6	1.9
Porcupine	4/29	29	6.1	5.5	6.6
Santa Maria	4/30	0	0.0	0.0	0.5
Upper Rio Grande	5/1	6	1.8	1.2	1.8
Wolf Cr. Pass	4/28	68	21.1	24.3	22.0
Wolf Cr. Summit	4/28	88	28.9	32.9	30.0
SAN JUAN-DOLORES					
Animas River					
Cascade	4/28	14	4.2	6.5	3.6
Lemon	4/29	5	1.3	0.0	- -
Mineral Creek	4/28	51	16.1	12.6	10.5
Molas Lake	4/28	38	12.1	10.4	6.8
Purgatory	4/29	58	18.2	NS	- -
Red Mountain	4/28	97	36.6	32.2	30.3
Silverton Sub-Sta	4/28	0	0.0	0.0	0.1
Spud Mountain	4/28	63	20.4	28.7	22.2
Dolores River					
Lizzard Head	4/29	55	17.3	22.3	12.9
Lone Cone	4/29	44	15.1	9.3	- -
Rico	4/29	5	1.3	0.0	0.4
Telluride	4/28	20	7.3	0.0	0.8
Trout Lake	4/28	42	13.7	8.9	8.5
San Juan River					
Chama Divide (B)	4/30	0	0.0	0.0	- -
Chamita (B)	4/30	0	0.0	0.0	- -
Upper San Juan	4/28	69	21.7	29.4	26.6
Wolf Cr. Pass(B)	4/28	68	21.1	24.3	22.0
Wolf Cr. Summit	4/28	88	28.9	32.9	30.0

NOTE:

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1970

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53 67
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/29	75	27.1	25.3	21.0
Black Mesa	NS			NS	15.8
Blue Mesa	4/30	25	8.1	0.0	1.9
Butte	4/30	59	17.9	14.1	- -
Cochetopa Pass(B)	4/28	32	7.7	2.1	2.6
Crested Butte	4/29	36	10.1	3.7	7.1
Keystone	4/29	66	19.2	14.6	17.1
Lake City	4/27	32	9.5	2.6	3.5
Long Gulch	NS				
Mesa Lakes (B)	4/26	65	21.3	15.0	15.1
McClure Pass	4/28	48	17.0	6.7	9.3
Park Cone	4/29	39	12.1	6.6	7.7
Park Reservoir	4/28	79	26.3	29.6	23.6
Porphyry Creek	4/29	64	19.6	12.9	16.5
Tomichi	4/29	45	13.8	8.8	10.0
Surface Creek					
Alexander Lake	4/29	75	27.1	25.3	21.0
Mesa Lakes (B)	4/26	65	21.3	15.0	15.1
Park Reservoir	4/28	79	26.3	29.6	23.6
Uncompahgre River					
Ironton Park	4/30	46	15.6	1.3	6.7
Red Mountain Pass	4/28	97	36.6	32.2	30.3
Telluride (B)	4/28	20	7.3	0.0	0.8
COLORADO BASIN (Main)					
Blue River					
Blue River	4/29	44	12.5	2.3	6.4
Fremont Pass	4/28	67	22.8	14.7	17.9
Frisco	4/28	34	11.4	0.2	4.6
Grizzley Peak	4/28	76	29.5	14.2	19.4
Hoosier Pass (B)	4/29	60	17.5	9.4	12.0
Shrine Pass	4/28	73	27.9	17.4	18.7
Snake River	4/28	29	11.6	0.0	3.5
Summit Ranch	4/29	32	10.6	2.2	4.8
Colorado River					
Arrow	4/29	50	18.6	8.0	9.2
Berthoud Pass	4/27	59	22.8	13.0	14.3
Berthoud Summit	4/29	82	32.4	12.2	20.6
Cooper Hill	4/28	58	17.1	10.2	11.1
Fiddler Gulch	4/29	64	18.8	9.4	14.7
Glen Mar Ranch	4/28	24	9.1	1.5	3.8
Gore Pass	4/29	38	13.8	4.6	7.3
Grand Lake	4/28	28	8.4	3.3	3.4
Lake Irene	4/28	83	31.1	17.1	22.4
Lapland	4/29	43	14.8	2.0	6.9
Lulu	4/29	81	29.3	15.1	18.3
Lynx Pass	4/29	43	15.3	4.0	7.1
McKenzie Gulch	4/27	18	4.9	0.0	0.6
Middle Fork	4/28	30	10.3	3.0	5.7
Milner	4/28	53	17.8	10.3	12.0
North Inlet	4/26	38	12.0	4.0	5.9
Pando	4/28	42	14.7	4.4	7.7
Phantom Valley	4/28	39	13.1	5.8	6.2
Ranch Creek	4/29	47	14.9	8.8	9.0
Tennessee Pass	4/30	52	13.0	5.7	7.7
Vail Pass	4/28	65	26.4	10.2	15.0
Vasquez	4/28	54	18.5	9.3	12.4
Roaring Fork River					
Aspen	4/28	72	26.7	16.0	16.0
Chapman	4/29	53	18.0	8.6	- -
Independence Pass	4/29	66	20.4	9.4	16.2
Ivanhoe	4/29	73	24.6	11.7	17.3
Kiln	4/29	40	13.4	4.2	- -
Last Chance	4/29	47	14.5	7.3	- -
Lift	4/28	70	24.9	16.4	18.0
McClure Pass	4/28	48	17.0	6.7	9.3
Nast	4/29	21	6.8	0.0	1.8
North Lost Trail	4/28	47	15.5	5.7	7.5
Williams Fork River					
Glen Mar Ranch	4/28	24	9.1	1.5	3.8
Jones Pass	4/28	64	24.1	9.7	15.4
Middle Fork	4/28	30	10.3	3.0	5.7
Willow Creek					
Granby	4/28	30	10.2	1.1	3.6
Willow Cr. Pass	4/28	50	16.5	11.0	10.0
Plateau Creek					
Mesa Lakes	4/26	65	21.3	15.0	15.1
Park Reservoir	4/28	79	26.3	29.6	23.6
Trickle Divide	4/29	87	29.8	30.8	26.5
YAMPA BASIN					
Elk River					
Clark	4/28	27	9.4	1.1	3.1
Elk River	4/28	60	20.6	14.2	13.6
Hahn's Peak	4/28	39	14.1	6.6	7.8
White River					
Burro Mountain	4/29	62	22.2	9.5	14.5
Rio Blanco	4/28	48	17.0	6.9	9.1
Yampa River					
Bear River	4/27	49	15.9	2.1	7.4
Columbine (B)	4/29	77	30.4	15.0	21.4
Dry Lake	4/30	63	23.8	13.1	15.2
Lynx Pass (B)	4/29	43	15.3	4.0	7.1
Rabbit Ears	4/29	97	37.7	23.1	25.9
Yampa View	4/29	47	15.8	3.6	8.4

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	4/29	11.1	7.1	8.3	8.4
Willow Pass	4/30	9.5	8.9	6.9	7.0
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	5/1	6.9	4.0	3.3	4.3
Big Thompson River					
Beaver Dam	4/29	7.1	5.3	6.3	4.7
Guard Station	5/2	6.9	3.7	5.0	4.5
Two Mile	4/29	9.1	6.7	5.5	5.4
Clear Creek					
Clear Creek	4/29	9.5	7.4	6.3	5.7
Hoop Creek	NS	4.9	- -	3.8	3.1
Cache La Poudre River					
Feather	4/28	10.1	7.6	9.3	7.9
Laramie Road	5/3	12.4	7.6	9.4	8.7
South Platte River					
Hoosier Pass	4/29	7.8	5.2	5.0	5.4
Kenosha Pass	4/28	4.4	2.7	4.2	3.5
ARKANSAS BASIN					
Arkansas River					
Garfield	4/29	6.7	4.3	4.1	4.8
Leadville	4/28	7.8	3.2	3.3	4.9
Twin Lakes Tunnel	4/28	4.5	1.9	2.8	3.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	4/27	10.7	7.1	8.7	8.8
Rio Grande					
Alberta Park	4/29	8.2	3.9	5.8	5.7
Bristol View	4/29	6.1	5.7	4.6	4.7
LaVeta Pass	4/28	11.9	11.5	11.4	11.6
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	4/28	9.1	5.6	6.0	7.7
Mineral Creek	4/28	4.7	3.9	4.0	4.5
Molas Lake	4/28	9.4	3.6	4.6	6.6
Dolores River					
Dolores	4/29	19.6	9.0	12.0	12.2
Lizzard Head	4/29	11.8	4.7	5.3	8.2
Rico	4/29	13.8	10.5	10.4	7.3
GUNNISON BASIN					
Gunnison River					
King	4/29	3.3	2.3	2.3	2.3
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	4/29	4.2	3.3	2.8	3.0
Colorado River					
Berthoud Pass	4/27	3.9	3.3	2.9	2.9
Gore	4/29	4.9	4.2	4.6	4.1
Grand Mesa	4/28	12.5	11.6	12.9	9.9
Ranch Creek	4/29	8.7	6.5	6.0	6.2
Vail	4/28	12.3	9.0	9.1	10.5
Roaring Fork River					
Placita	4/30	9.3	8.1	6.5	7.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	4/28	19.0	7.8	9.5	15.0

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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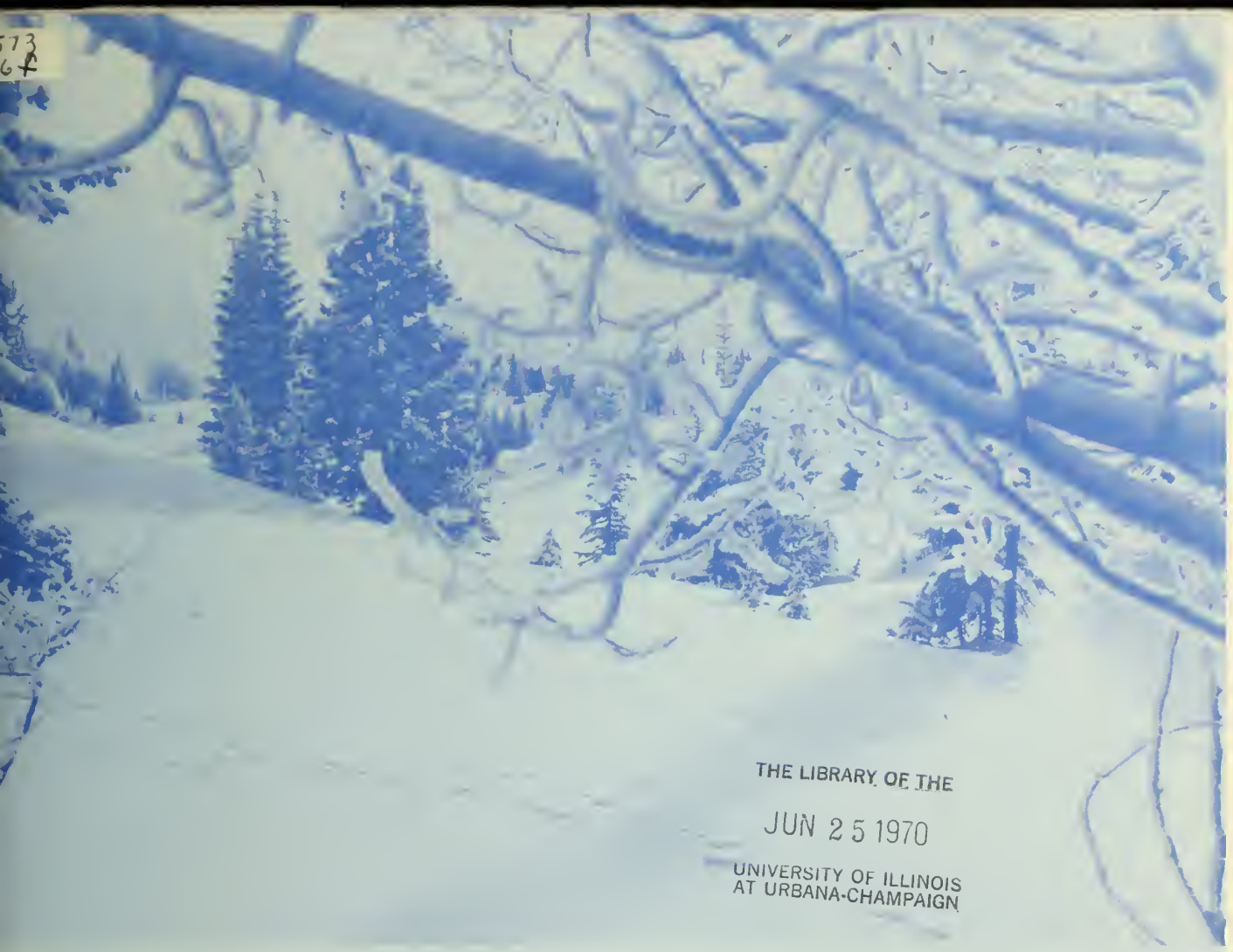
"The Conservation of Water begins with the Snow Survey"



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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE
and
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

MAY 15, JUNE 1, 1970
and
SPECIAL MEASUREMENTS

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS PORTLAND, OREG 1966

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

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SOIL CONSERVATION SERVICE
SPRUCE HALL
COLORADO STATE UNIVERSITY
FT. COLLINS, COLORADO 80521

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

SPECIAL EARLY SEASON SNOW REPORT FOR COLORADO

November 20, 1969

Water Supply Outlook
Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches	
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1953-67 Average	Jan. 1 Last Year
Berthoud Summit	11/18	33	8.2	7.2	5.3
Columbine	11/17	27	4.4	7.2*	9.5
Fremont	11/19	28	5.6	5.8*	4.9
Park View	11/18	25	4.7	No Average	No Reading
Porphyry Creek	11/14	25	6.5	6.9	5.1
Rabbit Ears	11/17	46	8.5	12.5	13.4
Red Mountain	11/14	36	10.6	11.4*	11.5
Spud Mountain	11/14	21	6.0	9.7*	8.8
Tennessee Pass	11/19	19	4.0	3.7	3.5
Upper San Juan	11/14	24	6.7	13.6*	14.0
Vail	11/19	24	5.4	5.6*	5.0
Willow	11/18	26	5.7	No Average	No Reading
Wolf Creek Pass	11/14	29	8.3	13.1*	11.7
Wolf Creek Summit	11/14	38	11.2	13.8*	10.8

* Less than 15 years of record.

Snow started falling early this year in Colorado. Normally the first snow surveys are made January 1st, however, because of the large amount of snow this early measurement was undertaken.

The snow line is generally around 9,000 feet on the north slopes and slightly higher on the south slopes. The southern part of the state received less snow, percentage wise than other areas.

Some of the areas are approaching January 1 normals or even surpassed it.

Soil moisture in the mountains is excellent indicating some of the early snow has already melted.

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1970

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

SNOW COURSES	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1953-67 Average	Jan. 1 Last Year	Feb. 1 1953-67 Average
Berthoud Summit	12/28	51	13.4	7.2	5.3	10.8
Columbine Lodge	12/31	44	10.7	7.2	9.5	15.6
Fremont Pass	12/28	48	10.6	5.8	4.9	9.5
Mesa Lakes	12/31	35	8.5	6.5	5.9	10.3
Porphyry Creek	12/30	45	11.8	6.9	5.1	10.1
Red Mountain	12/30	54	15.2	11.4	11.5	17.0
Spud Mountain	12/30	35	9.5	9.7	8.8	15.0
Tennessee Pass	12/29	34	7.6	3.7	3.5	6.2
Two Mile	12/30	39	10.5	5.9	5.0	7.9
University Camp	12/30	43	11.1	7.1	4.6	10.9
Upper San Juan	12/30	39	10.5	13.6	14.0	19.4
Vail Pass	12/30	43	10.2	5.6	5.2	10.0
Wolf Creek Pass	12/30	44	12.0	13.1	11.7	17.8
Wolf Creek Summit	12/30	48	14.3	13.8	10.8	17.7

Some snow courses have records of less than 15 years.

The winter snows started early and have continued over most of Colorado.

The only area of the State that isn't above normal as of January 1st, is the Wolf Creek Pass area. The snow in that area is nearly normal.

The snow pack is also somewhat spotty. Some areas are almost 200% of normal while adjacent drainages are only 150% of normal.

Soil moisture is generally good due to early winter snows melting.

Carry-over storage in the reservoirs is good.

These early season snow surveys are only indications, but from this data it looks like a good snow year.

SPECIAL SNOW SURVEY INFORMATION

April 15, 1970

Water Supply Outlook
Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information				Past Record Water Content in Inches	
SNOW COURSES	Date of Survey	Snow Depth Inches	Water Content Inches	1970 Apr. 1 Reading	Apr. 1 1953-67 Avg.	May 1 1953-67 Avg.
North Platte Basin						
Cameron Pass	4/14	93	33.8	33.1	26.5	28.4
Columbine Lodge	4/15	77	27.6	27.8	23.5	21.4
Northgate	4/13	32	9.0	8.5	6.2	2.7
Willow Creek Pass	4/13	53	17.3	15.9	12.5	10.0
South Platte Basin						
Boulder Falls	4/12	60	19.8	18.4	13.3	11.9
Cameron Pass	4/14	93	33.8	33.1	26.5	28.4
Copeland Lake	4/15	24	8.5	7.5	4.4	1.7
Joe Wright	4/14	94	33.2	30.1	- -	- -
Red Feather	4/10	35	10.9	- -	7.2	4.4
University Camp	4/12	75	27.0	22.7	20.7	20.7
Ward	4/15	38	11.3	9.6	6.7	5.4
Arkansas Basin						
Fremont Pass	4/13	67	21.3	19.9	16.1	17.9
Porphyry (B)	4/13	61	19.8	18.8	16.9	16.5
Rio Grande Basin (Colo.)						
Culebra	4/13	34	10.6	8.3	8.4	3.5
Lake Humphrey	4/15	14	3.7	5.1	5.5	0.4
Pass Creek	4/13	20	7.5	5.7	11.1	3.9
Pool Table	4/15	25	5.8	4.9	5.9	1.9
Porcupine	4/14	39	8.8	9.7	10.1	6.6
Santa Maria	4/13	4	1.0	1.8	3.7	0.5
Upper Rio Grande	4/15	17	4.2	4.3	6.8	1.8
Wolf Creek Pass	4/13	66	23.0	20.5	27.0	22.0
Wolf Creek Sum.	4/13	80	26.9	24.7	28.0	30.0

SNOW COURSES	Current Information: Date of Survey	Snow Depth Inches	Water Content Inches	1970 Apr. 1 Reading	Past Record Water Content in Inches: Apr. 1 1953-67 Avg.	May 1953-67 Avg.
San Juan-Dolores Basin						
Cascade	4/13	18	5.9	7.3	10.8	3.6
Mineral Creek	4/13	52	16.3	15.8	14.6	10.5
Molas Lake	4/13	36	11.4	11.7	12.6	6.8
Red Mountain	4/13	89	34.2	31.5	30.1	30.3
Silverton Sub	4/13	8	2.6	5.3	5.1	0.1
Spud Mountain	4/13	56	18.3	18.6	23.1	22.2
Upper San Juan	4/13	68	23.7	21.1	30.8	26.6
Wolf Creek Pass (B)	4/13	66	23.0	20.5	27.0	22.0
Wolf Creek Sum.	4/13	80	26.9	24.7	28.0	30.0
Gunnison Basin						
Alexander Lake	4/14	73	25.2	23.6	21.4	21.0
Crested Butte	4/13	44	12.3	13.1	13.3	7.1
Ironton Park	4/13	50	13.0	16.6	12.0	6.7
McClure Pass	4/14	48	17.0	17.3	14.6	9.3
Porphyry	4/13	61	19.8	18.8	16.9	16.5
Red Mountain	4/13	89	34.2	31.5	30.1	30.3
Colorado Basin (Main)						
Fremont Pass	4/13	67	21.3	19.9	16.1	17.9
Frisco	4/13	36	11.3	10.6	7.5	4.6
Lake Irene	4/15	87	30.6	27.4	20.7	22.4
Lynx Pass	4/14	48	15.2	15.7	12.0	7.1
McClure	4/14	48	17.0	17.3	14.6	9.3
Milner Pass	4/15	58	18.6	18.5	13.3	12.0
North Lost Trail	4/14	52	16.6	16.6	14.1	7.5
Phantom Valley	4/15	45	15.1	14.9	10.4	6.2
Willow Creek Pass Pass	4/13	53	17.3	15.9	12.5	10.0
Yampa-White Basin						
Burro Mountain	4/15	59	20.4	20.0	17.0	14.5
Dry Lake	4/16	59	21.1	20.8	19.9	15.2
Rabbit Ears	4/15	87	31.6	31.8	25.7	25.9
Yampa View	4/15	47	16.0	18.1	14.3	8.4

(B) - On adjacent drainages

Mid April measurements indicate the mountain snow is still high in the north and low in the south as indicated on the first of the month report. Forecasts remain about the same as April 1st.

The snow pack on the Rio Grande and San Juan drainages is still below normal, however, the snow pack on the Animas is slightly improved.

Snow pack on the Sangre de Cristo was improved by the end of the month, storm, but the mainstem of the Rio Grande is still below normal.

The South Platte continues to have an excellent snow pack.

Most of the snow courses on the Colorado Basin are above April 1st and May 1st averages. Streamflow should be good.

The Arkansas should flow above normal this summer. The snow pack has slightly improved since April 1st.

Soil moisture is good over most of the state. Current streamflow is low due to the cool weather. Snow melt has not started except at the very low elevations.

May 15, 1970

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	May 15 Average	May 15 Last Year	May 1 1953-67 Average
Berthoud Summit	5/12	68	27.4	19.3	18.8	20.6
Cameron Pass	5/13	75	34.9	25.6	28.9	28.4
Columbine Lodge	5/13	55	24.7	12.5	0.6	21.4
Fremont Pass	4/12	51	19.7	15.5	12.3	17.9
Mesa Lakes	5/12	41	14.8	8.8	2.7	15.1
Milner Pass	5/16	32	12.3	---	4.7	12.0
Park View	5/13	18	6.0	2.1	0.2	5.6
Porphyry Creek	5/13	45	17.5	13.4	11.9	16.5
Red Mountain	5/13	73	31.5	30.3	27.3	25.4
Spud Mountain	5/13	41	15.4	18.9	23.9	22.2
Tennessee Pass	5/12	25	8.9	2.4	0.0	7.7
Two Mile	5/15	67	24.4	16.4	17.3	17.0
University Camp	5/15	50	21.3	18.4	18.9	20.7
Upper San Juan	5/13	38	14.9	18.6	18.3	26.6
Vail Pass	5/12	43	18.9	10.2	4.6	15.0
Willow Creek Pass	5/13	31	12.1	5.4	1.0	10.0
Wolf Creek Pass	5/13	39	15.5	14.5	14.8	22.0
Wolf Creek Summit	5/13	72	25.9	31.4	33.3	30.0

Cool temperatures have retarded runoff so far this month.

Some melting has occurred, however, it has not been extensive.

Forecasts remain about the same as May 1st.

Adequate water is forecast over all of Colorado except the Rio Grande and San Juan Drainage.

June 1, 1970

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	June 1 Average	June 1 Last Year	May 1 1953-67 Average
Berthoud Summit	5/26	38	15.7	11.5	11.1	20.6
Cameron Pass	5/27	45	22.4	18.2	17.2	28.4
Columbine Lodge	5/28	9	3.8	3.0	0.0	21.4
Fremont Pass	5/26	21	7.7	7.7	5.1	17.9
Mesa Lakes	5/26	0	0.0	0.7	0.0	15.1
Milner Pass	5/30	4	1.7	- -	0.0	12.0
Park View	5/27	0	0.0	0.1	0.0	5.6
Porphyry Creek	5/28	4	1.6	6.6	0.0	16.5
Red Mountain	5/27	35	15.5	12.2	10.7	25.4
Spud Mountain	5/27	15	6.5	10.6	12.3	22.2
Tennessee Pass	5/27	0	0.0	0.0	0.0	7.7
Two Mile	5/31	46	17.4	12.7	10.1	17.0
University Camp	5/29	27	10.6	10.7	0.9	20.7
Upper San Juan	5/27	2	0.7	5.2	1.1	26.6
Vail Pass	5/27	12	4.9	3.3	0.0	15.0
Willow Creek Pass	5/27	1	0.5	0.9	0.0	10.0
Wolf Creek Pass	5/27	0	0.0	5.5	0.0	22.0
Wolf Creek Summit	5/27	44	18.0	23.7	24.4	30.0

Snow pack is rapidly disappearing at all but the very high elevations. Snow still remains above normal in middle and northern Colorado and below normal in the southern section.

A number of northern and middle west slope streams are out of their banks, however, no serious flooding has been reported.

East slope streams are running high, however, use has also been high. No serious snow melt flooding has occurred in this area. Most forecasts remain about the same as May 1st.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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"The Conservation of Water begins with the Snow Survey"

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May 15, 1970

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

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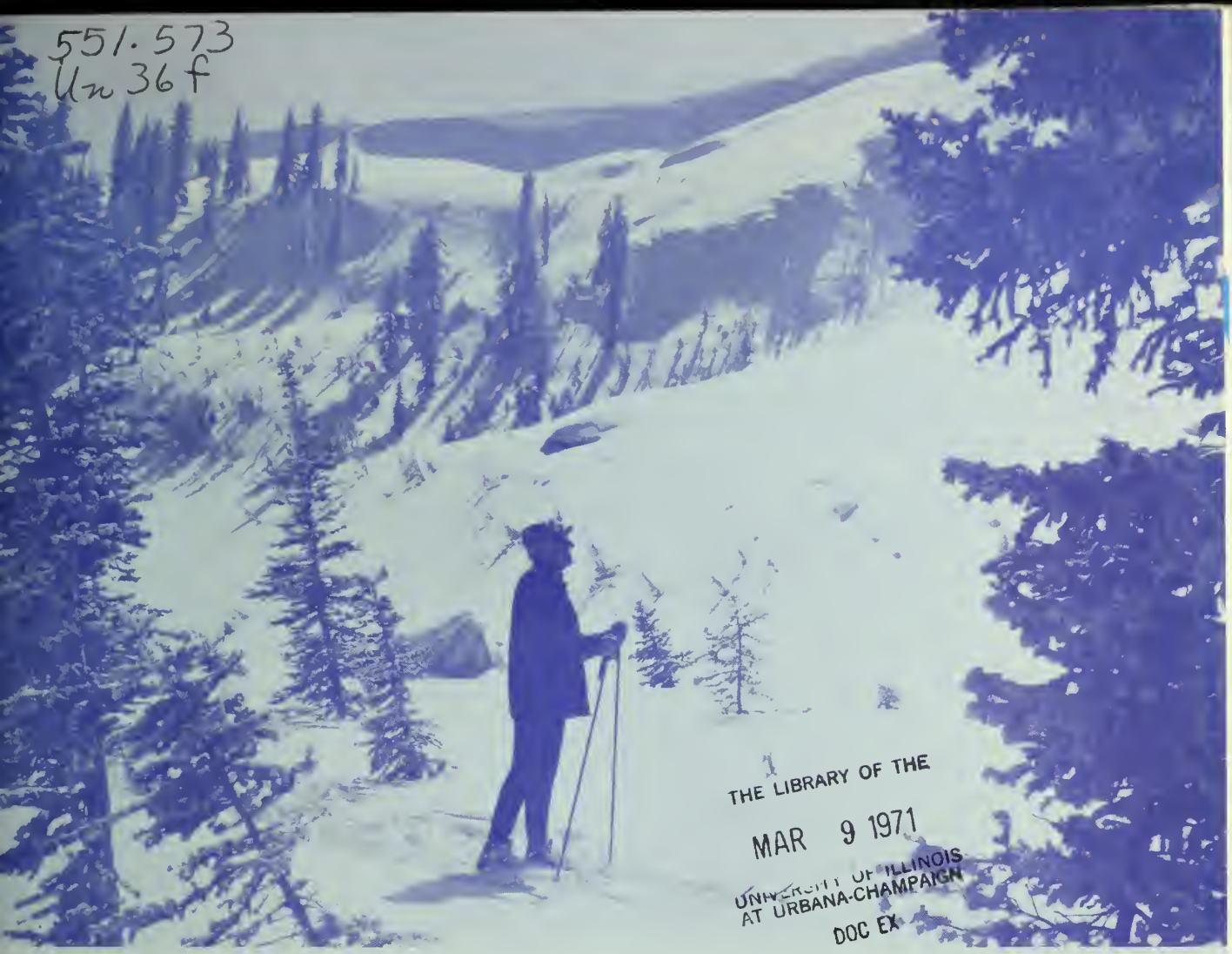

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
FEB. 1, 1971

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automotic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

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SOIL CONSERVATION SERVICE
DENVER, COLORADO

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SOIL CONSERVATION SERVICE
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In Cooperation with

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Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
and
RONALD E. MORELAND, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE
SPRUCE HALL
COLORADO STATE UNIVERSITY
FT. COLLINS, COLORADO 80521

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Bronson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxtun, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

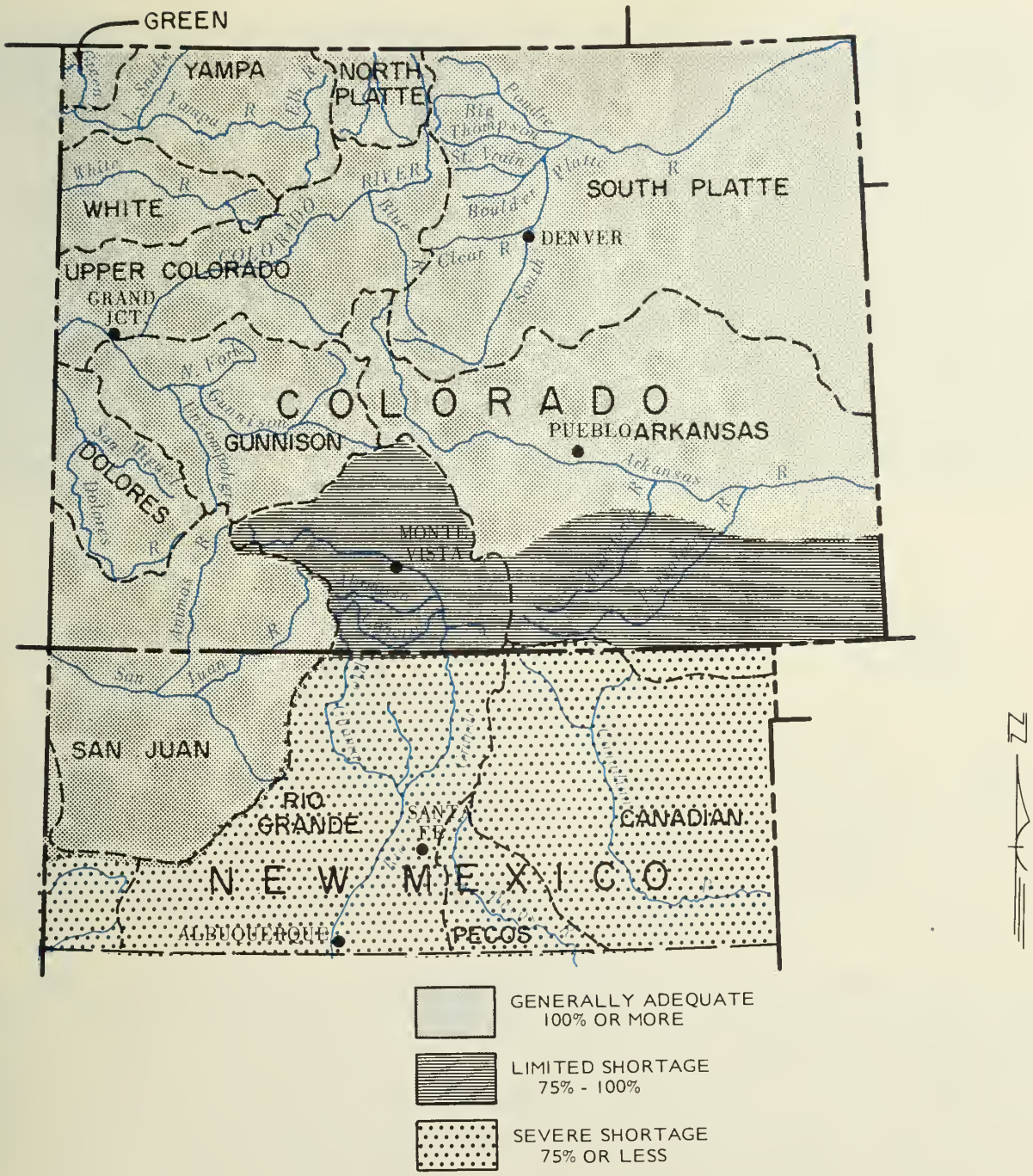
APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

February 1, 1971



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

February 1, 1971

THE SNOW PACK IN COLORADO AND NEW MEXICO AREAS VARIES FROM MUCH ABOVE NORMAL TO MUCH BELOW.

THE SNOW FIELDS IN NORTHERN COLORADO IS MUCH ABOVE NORMAL AND GRADUALLY DECREASES TO THE SOUTH UNTIL AT THE COLORADO, NEW MEXICO BORDER THERE IS ONLY ABOUT 75%.

THIS TREND CONTINUES INTO NEW MEXICO. IN THE SANTA FE AREA THE SNOW PACK IS LESS THAN 50% OF NORMAL.

RESERVOIR CARRY-OVER STORAGE IN COLORADO IS EXCELLENT. IN NEW MEXICO STORAGE IS JUST SLIGHTLY LESS THAN THE 1953-67 AVERAGE.

ONLY A FEW STATIONS ARE REPORTING GOOD VALLEY SOIL MOISTURE WITH A FEW REPORTING POOR CONDITIONS.

COLORADO -- THE SNOW PACK IN THE NORTHERN PART, THE CACHE LA POUDRE NORTH PLATTE, AND YAMPA-WHITE DRAINAGES IS EXCELLENT. SOME SNOW COURSES INDICATE MORE SNOW ON FEBRUARY 1st THAN ANY TIME ON RECORD. THE MIDDLE PORTION OF THE STATE OR THE COLORADO MAIN STEM, UPPER PLATT AND GUNNISON DRAINAGES HAVE NEAR NORMAL SNOW PACK.

THE SOUTHERN PORTION HAS ABOUT 75% OF THE 1953-67 AVERAGE SNOW PACK.

RESERVOIR STORAGE IS EXCELLENT OVER THE ENTIRE STATE. THE SOUTH PLATTE BASIN HAS 157% AND RIO GRANDE 186% OF NORMAL CARRY-OVER.

MOST IRRIGATED AREAS ARE REPORTING POOR TO FAIR SOIL MOISTURE CONDITIONS. THIS IS NOT UNUSUAL AND COULD BE RECTIFIED BY ONE GOOD VALLEY STORM.

NEW MEXICO -- AS OF FEBRUARY 1st, WATER SUPPLY PROSPECTS FOR NEW MEXICO ARE POOR. THE CURRENT SNOW PACK IS MUCH BELOW NORMAL. JANUARY WAS A VERY DRY MONTH OVER MOST OF THE STATE. SEVERAL SNOW COURSES REPORT THE MINIMUM OF SNOW EVER RECORDED ON FEBRUARY 1st.

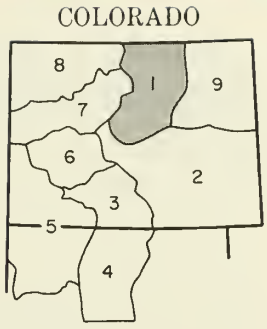
CARRY-OVER STORAGE IS SLIGHTLY BELOW NORMAL. ELEPHANT BUTTE CONTAINS 369,000 a.f. WHICH IS NEAR NORMAL. STORAGE ON PECOS DRAINAGE IS ABOUT 78% OF NORMAL. MOST IRRIGATED AREAS ARE REPORTING POOR SOIL MOISTURE CONDITIONS. MOUNTAIN SOILS ON THE RIO GRANDE DRAINAGE ARE IN GOOD CONDITION.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

THE WATER SUPPLY OUTLOOK FOR THIS SUMMER IS MOST OPTIMISTIC. THE SNOWPACK IN THE SOUTH PLATTE RIVER WATERSHED IS NEAR AVERAGE TO ABOVE AVERAGE. THE HEAVIEST SNOWPACK IS ON THE CACHE LA POUDRE AND THE BIG THOMPSON BASINS. THE UPPER SOUTH PLATTE WATERSHED HAS 85% OF AVERAGE. THERE IS A GRADUAL DECLINE OF SNOWPACK FROM THE NORTHERN TO THE SOUTHERN TRIBUTARIES.

RESERVOIR STORAGE IS 157% OF NORMAL. THIS WILL BE A GOOD SOURCE OF SUPPLEMENTAL WATER. IRRIGATED SOILS ARE REPORTED TO HAVE GOOD SOIL MOISTURE.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELANO
SOIL CONSERVATION SERVICE, COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO

Issued by

M. O. BUROICK---STATE CONSERVATIONIST — DENVER, COLORADO
O. W. GILLASPIE---AREA CONSERVATIONIST — DENVER, COLORADO
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
Deer Creek	Exc.	Avg.
North Fork of So. Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minu diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	86	142
Boulder	3	66	103
Cache La Poudre	6	98	171
Clear Creek	6	57	94
Saint Vrain	2	58	100
South Platte	3	50	84

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	91	113
Boulder	1	141	130
Cache La Poudre	2	67	100
Clear Creek	2	104	115
Saint Vrain	2	111	132
South Platte	2	109	109

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	25.9	25.9	17.6
Black Hollow	8.0	4.3	4.0	3.3
Boyd Lake	44.0	44.0	30.0	27.6
Cache La Poudre	9.5	7.8	8.4	6.6
Carter Lake	108.9	93.6	80.7	61.9
Chambers Lake	8.8	3.9	2.5	2.3
Cheesman	79.0	74.2	79.1	45.6
Cobb Lake	34.3	22.1	17.9	9.9
Eleven Mile	97.8	96.4	96.4	72.0
Fossil Creek	11.6	9.1	10.0	5.4
Gross	43.1	35.0	36.8	24.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6.4	0.3	4.8	3.1
Horsetooth	143.5	99.1	81.5	81.2
Lake Loveland	14.3	10.0	11.8	7.9
Lone Tree	9.2	8.0	8.5	6.0
Mariano	5.4	5.1	5.1	3.7
Marshall	10.3	5.6	7.0	2.1
Marston	18.0	16.6	15.9	14.1
Milton	24.4	14.0	13.1	9.0
Standley	18.5	30.4	28.6	7.9
Terry Lake	42.0	6.3	0.0	4.6
Union	12.7	12.7	11.8	7.8
Windsor	18.6	4.7	12.9	7.6

+ 1958-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of
February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IN THE ARKANSAS BASIN IS JUST NORMAL. THE SOUTHERN PART OF THE BASIN HAS THE POOREST SNOW AND SOUTHERN MOST TRIBUTARIES, THE CUCHARAS AND PURGATORY, HAVE LESS THAN NORMAL SNOW COVER.

RESERVOIR STORAGE IS EXCELLENT, EXCEPT JOHN MARTIN, WHICH CONTAINS ONLY 14,600 a.f. GENERALLY THE STORAGE WILL PROVIDE AN EXCELLENT SUPPLEMENTAL SUPPLY.

VALLEY SOILS ARE LISTED AS FAIR TO POOR. MOUNTAIN SOILS ARE WETTER THAN USUAL.

This report prepared by
JACK N WASHICHEK and RONALD E. MORELANO
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FORT COLLINS, COLORADO

Issued by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Avg.
Fountain Creek	Avg.	Avg.
Grape Creek	Avg.	Avg.
Hardscrabble Creek	Avg.	Avg.
Huerfano	Avg.	Avg.
Monument Creek	Avg.	Avg.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	7	67	97
Cucharas and Purgatorie	2	92	54

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	87	90
Cucharas and Purgatorie	1	114	131

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe Creek	61.6	33.1	17.3	11.5
Clear Creek	11.4	3.7	10.2	6.6
Cucharas	40.0	- -	0.2	6.9
Great Plains	150.0	110.4	98.2	26.9
Horse Creek	26.9	3.4	9.5	4.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	14.6	39.9	81.5
Meredith	41.9	26.0	25.3	5.7
Model	15.0	1.8	1.2	2.6
Turquoise	130.0	46.4	42.2	6.9
Twin Lakes	57.9	42.2	34.8	19.7

+ 1953-1967 period.

Return if not delivered
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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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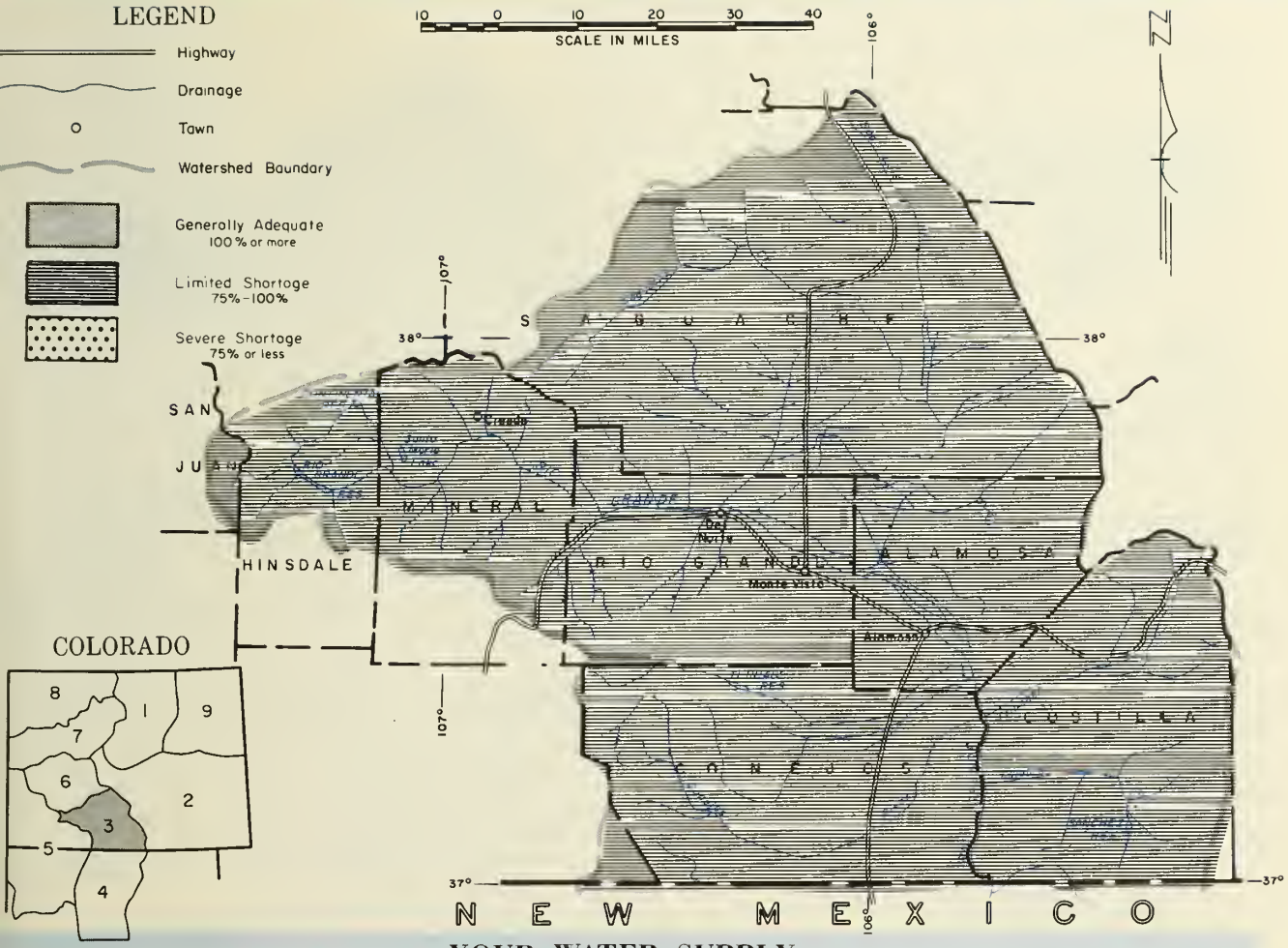
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE FEBRUARY 1st SNOW PACK IN THE RIO GRANDE VALLEY IS NORMAL TO SLIGHTLY BELOW. THE MAIN STEM OF RIO GRANDE HAS 72% OF NORMAL PACK.

RESERVOIR STORAGE IS EXCELLENT. IT IS 107% BETTER THAN LAST YEAR AND 186% OF NORMAL.

SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD IN THE IRRIGATED AREAS. THE MOUNTAIN SOILS ARE WETTER THAN USUAL.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Avg.
Sangre de Cristo Creek	Avg.	Fair
Trinchera Creek	Avg.	Fair

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus chonge in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Sonto Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	168	100
Conejos	2	135	80
Culebra	2	102	78
Rio Grande	10	98	72

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	100	120
Conejos	1	69	89
Culebra	2	108	117
Rio Grande	3	106	125

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	7.9	5.5	3.8
Platoro	60.0	2.9	3.0	7.1
Rio Grande	45.8	39.2	26.7	10.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	16.9	18.9	10.6
Santa Maria	45.0	9.8	5.9	5.3
Terrace	17.7	0.0	11.7	3.5

+ 1953-1967 period.

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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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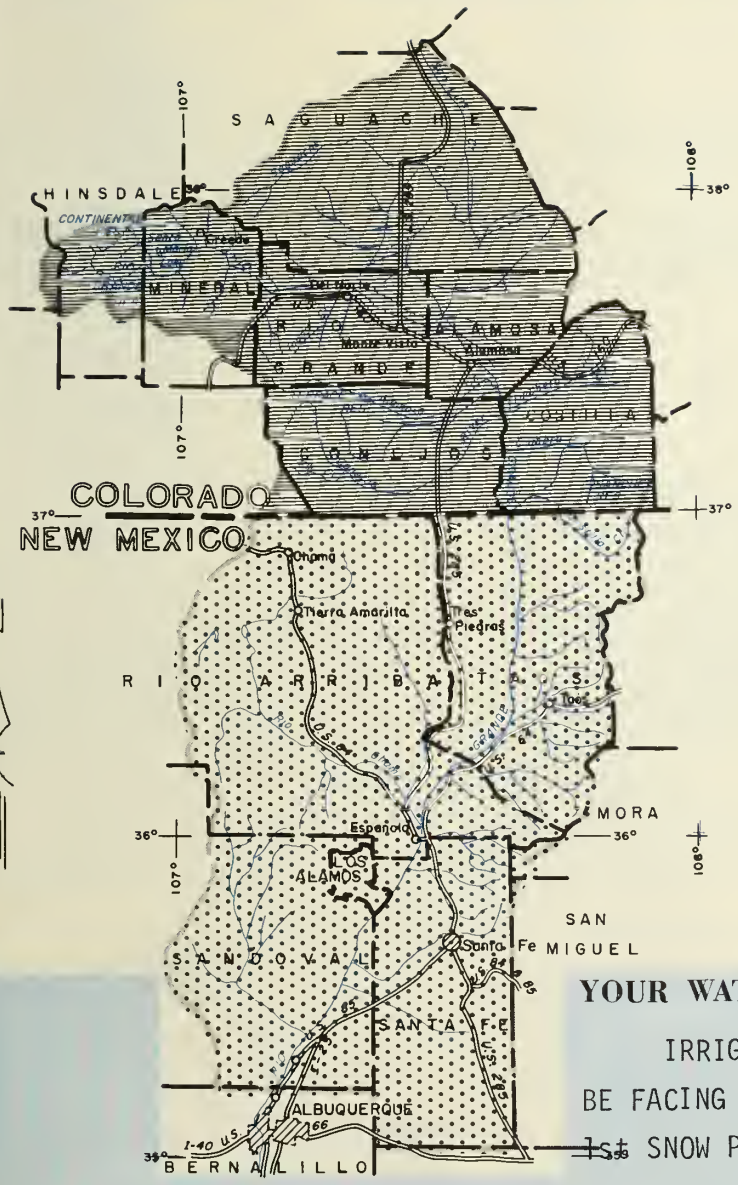
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

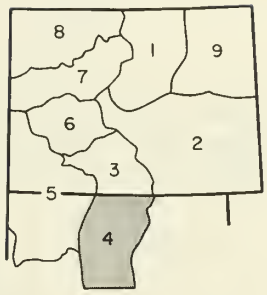
as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



COLORADO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

IRRIGATED AREAS IN NEW MEXICO COULD BE FACING ANOTHER DRY YEAR. THE FEBRUARY 1st SNOW PACK IS VERY DEFICIENT. SEVERAL SNOW COURSES ARE THE MINIMUM OF RECORD.

RESERVOIR STORAGE HAS DECLINED SINCE LAST YEAR AND IS ABOUT 92% OF NORMAL.

MUCH SNOW IS NEEDED TO INSURE ADEQUATE WATER THIS SUMMER.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo	Fair	Poor
Jemez River	Fair	Poor
Mora River	Fair	Poor
Nambe Creek	Fair	Poor
Rio Ojo Caliante	Fair	Poor
Rio Pueblo de Taos	Fair	Poor
Santa Fe Creek	Fair	Poor

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	16	4
Rio Chama	4	114	76
Rio Grande, N.M.	11	66	35
Rio Hondo	1	38	--
Red River	2	58	29

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	84	84
Rio Chama	2	76	63
Rio Grande	5	84	106
Red River	1	80	73

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	50	77	73
Caballo	344	30	44	47
Conchas	273	154	230	163

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Elephant Butte	2195	369	534	374
Elvado	195	1	1	4
McMillan-Avalon	38	22	38	19

+ 1953-1967 period.

Return if not delivered
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SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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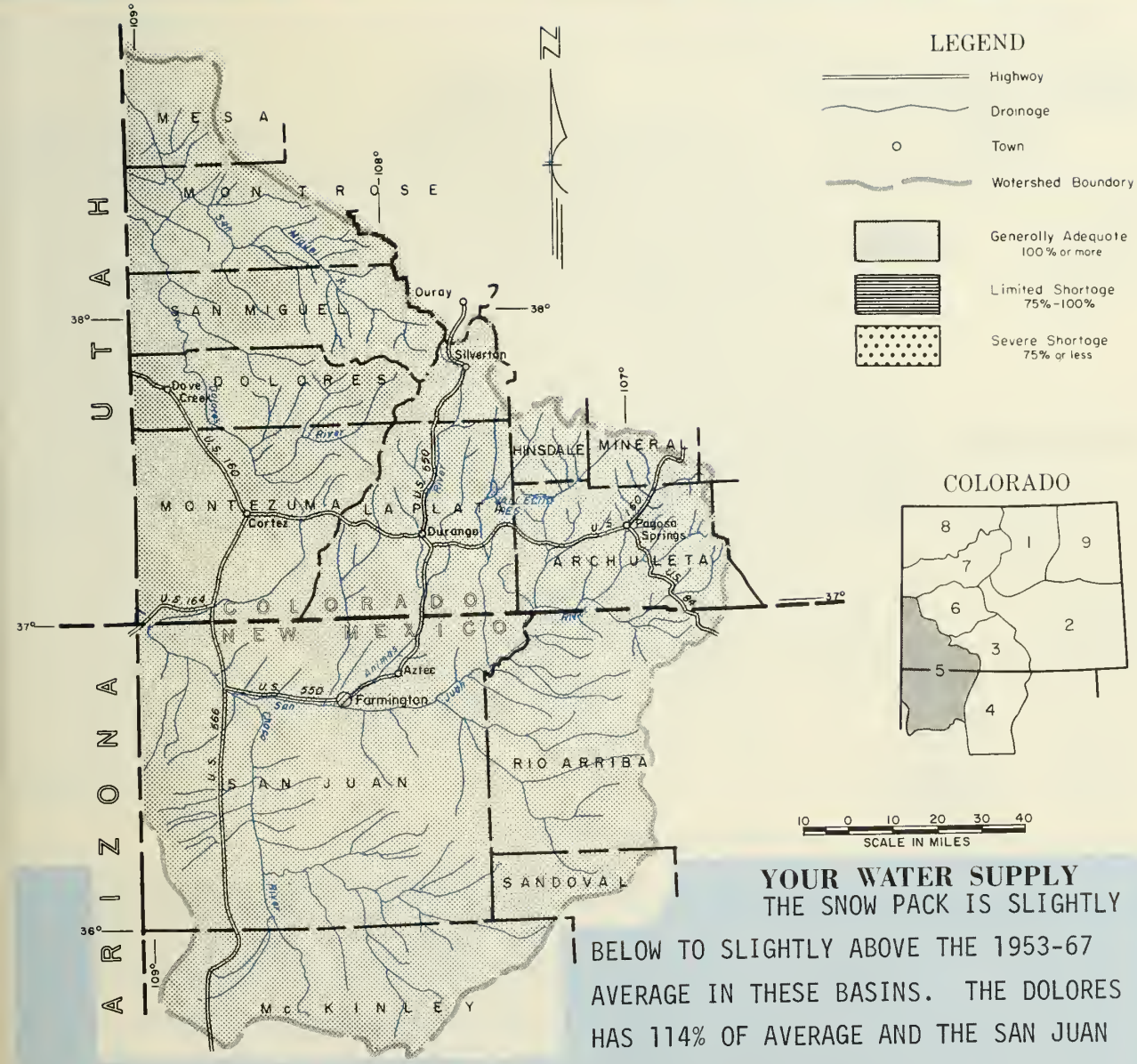
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK IS SLIGHTLY BELOW TO SLIGHTLY ABOVE THE 1953-67 AVERAGE IN THESE BASINS. THE DOLORES HAS 114% OF AVERAGE AND THE SAN JUAN AND ANIMAS BASINS ARE 90%. AVERAGE TO ABOVE AVERAGE SNOWFALL WILL BE NEEDED TO PROVIDE NORMAL WATER SUPPLIES THIS SUMMER.

RESERVOIR STORAGE IS 164% OF THE AVERAGE FOR THE SMALL RESERVOIRS. NAVAJO RESERVOIR CONTAINS 940,000 a.f. WHICH IS 90% OF LAST YEAR.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Avg.
Mancos	Exc.	Avg.
San Miguel	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	107	98
Dolores	4	98	114
San Juan	5	138	90

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	120	107
Dolores	3	102	94
San Juan	2	105	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	14	13	7
Lemon	40	26	30	14
Navajo	1696	940	1035	334
Vallecito	126	73	74	46

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IN THE GUNNISON BASIN IS 109% OF THE 1953-67 AVERAGE. THE UNCOMPAHGRE HAS 122% AND THE SURFACE CREEK HAS 128% OF AVERAGE. WATER SUPPLIES SHOULD BE ADEQUATE IF NORMAL SNOWFALL CONTINUES THROUGHOUT THE REMAINDER OF THE SNOW SEASON.

TAYLOR RESERVOIR STORAGE IS 104,000 a.f. THIS IS 9,000 a.f. ABOVE LAST YEAR AND 193% OF THE 1953-67 AVERAGE.

SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AND IRRIGATED SOILS ARE GOOD.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Avg.
Taylor	Exc.	Avg.

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	10	89	109
Surface Creek	3	116	128
Uncompahgre	3	91	122

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	105	121
Surface Creek	1	119	119
Uncompahgre	1	119	119

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	543	606	- -
Morrow Point	121	116	40	- -
Taylor	106	104	95	54

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY
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FORT COLLINS, COLORADO 80521

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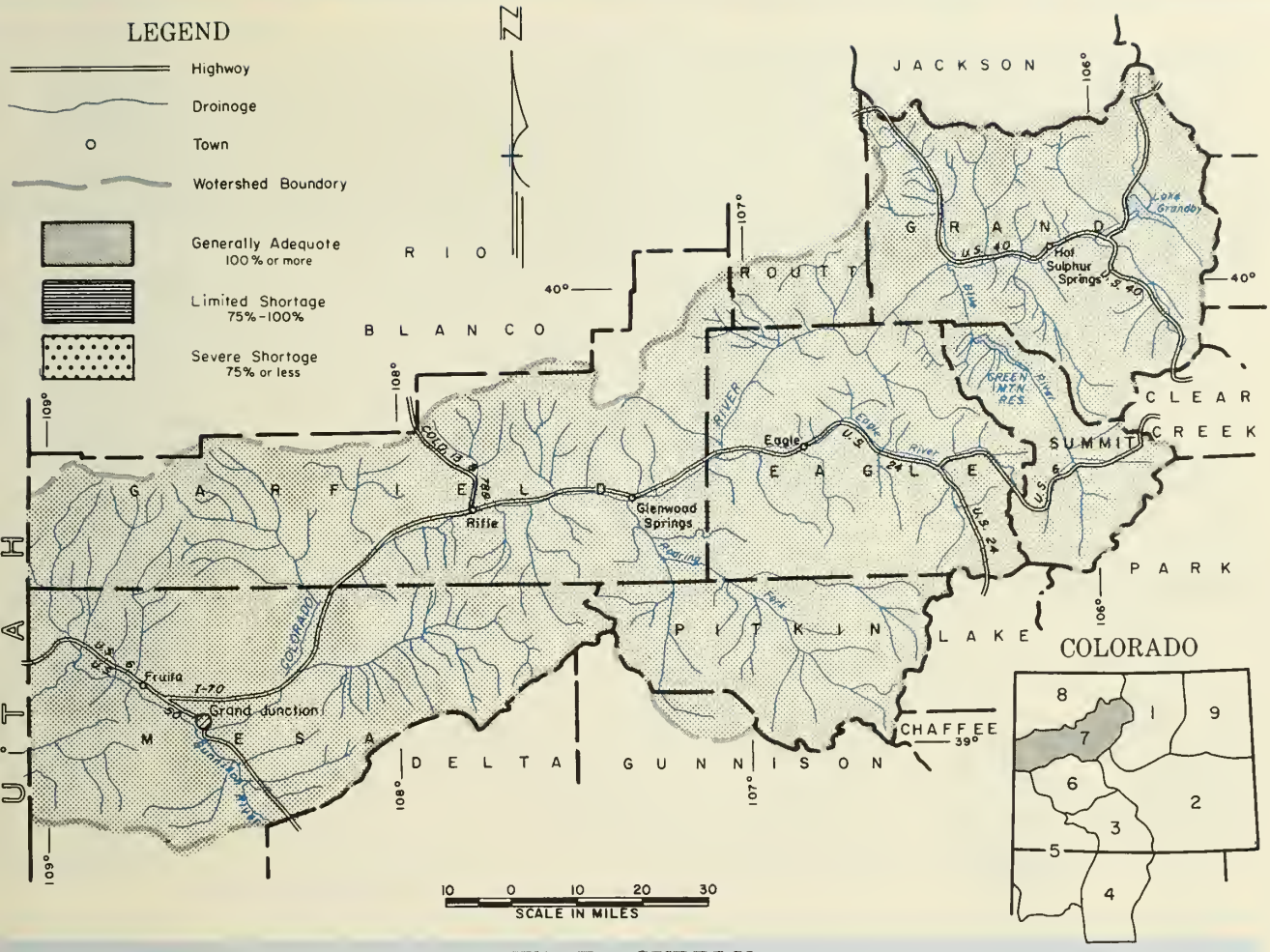
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE CURRENT SNOW PACK IN THE COLORADO RIVER BASIN IS ABOVE THE 1953-67 AVERAGE. THE COLORADO MAIN STEM IS 143% WHILE THE WILLIAMS FORK IS 165% AND THE BLUE RIVER 123% OF NORMAL. THE ROARING FORK HAS 117% OF AVERAGE. WATER SUPPLIES SHOULD BE MORE THAN ADEQUATE IF NORMAL SNOWFALL OCCURS DURING THE REMAINDER OF THE SNOW SEASON.

RESERVOIR STORAGE IS WELL ABOVE AVERAGE AND SOIL MOISTURE CONDITIONS ARE GOOD IN BOTH THE MOUNTAIN AND IRRIGATED SOILS.

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush Creek	Exc.	Exc.
Eagle River	Exc.	Exc.
Gypsum Creek	Exc.	Exc.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	73	123
Colorado	18	94	143
Plateau	3	120	121
Roaring Fork	7	91	117
Williams Fork	3	104	165
Willow	2	98	144

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	110	121
Colorado	5	96	113
Roaring Fork	1	108	135
Willow	1	127	121

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	246	239	131
Granby	466	380	285	254
Green Mountain	147	91	87	73
Homestake	43		20	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	79	75	--
Williams Fork	97	54	51	33
Willow Creek	9	7	7	--
Vega	32	17	13	11

+ 1953-1967 period.

Return if not delivered
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COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

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FIRST CLASS MAIL

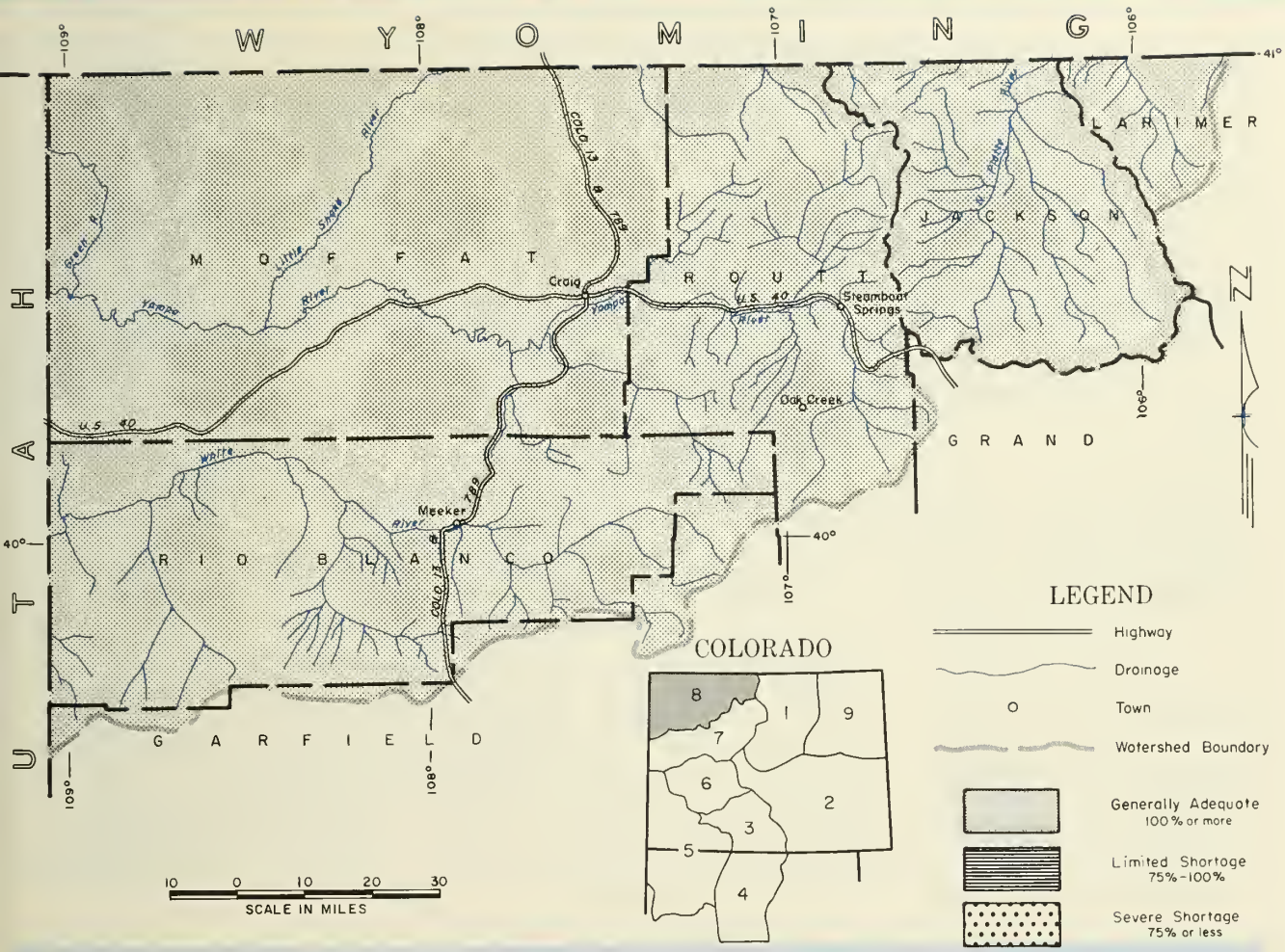
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW PACK IN THESE BASINS IS THE HIGHEST IN THE STATE RUNNING FROM 194% OF THE 1953-67 AVERAGE ON THE ELK RIVER, 171% ON THE YAMPA AND 133% ON THE WHITE RIVER. SNOW PACK IS SLIGHTLY HIGHER THAN LAST YEAR AT THIS TIME. WITH THIS MUCH EARLY SNOW PACK THE WATER SUPPLY OUTLOOK FOR THIS SUMMER IS EXCELLENT.

SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AND IRRIGATED SOILS ARE AVERAGE.

This report prepared by

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DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	2	101	101
Laramie	2	97	157
North Platte	5	107	164
White	2	104	133
Yampa	5	106	171

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	67	100
North Platte	2	104	109
Yampa	1	208	108

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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CO-8b

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THIS SUMMER'S WATER SUPPLY OUTLOOK IS VERY GOOD. THE SNOW PACK IS NEAR AVERAGE DESPITE LOW SNOWFALL AND WARM TEMPERATURES DURING JANUARY. SNOW PACK IS HEAVIEST ON THE CACHE LA POUDRE AND BIG THOMPSON DECREASING GRADUALLY TO THE SOUTH WITH 94% ON CLEAR CREEK.

RESERVOIR STORAGE IS ABOUT 130% OF NORMAL. RESERVOIR CARRY-OVER IN THE UPPER SOUTH PLATTE IS WELL ABOVE AVERAGE.

SOIL MOISTURE CONDITIONS ARE GOOD IN BOTH THE MOUNTAIN AND IRRIGATED SOILS.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELANO
SOIL CONSERVATION SERVICE, COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO

Issued by
M. O. BUROICK ---STATE CONSERVATIONIST
D. W. GILLASPIE---AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1971			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Exc.	Exc.
South Platte from Ft. Morgan to Sterling	Exc.	Exc.
South Platte below Sterling	Exc.	Exc.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	85	142
Boulder	3	66	103
Cache La Poudre	6	98	171
Clear Creek	6	57	94
Saint Vrain	2	58	100
South Platte	3	50	84

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	91	113
Boulder	1	141	130
Cache La Poudre	2	67	100
Clear Creek	2	104	115
Saint Vrain	2	111	132
South Platte	2	109	109

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	93.6	80.7	61.9
Cheesman	79.0	74.2	79.1	45.6
Eleven Mile	97.8	96.4	96.4	72.0
Empire	37.7	26.6	29.6	22.3
Horsetooth	143.5	99.1	81.5	81.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	29.7	29.2	27.4
Julesburg	28.2	19.8	20.1	20.0
Point of Rocks	70.0	67.0	66.4	43.2
Prewitt	32.8	21.4	19.8	11.4
Riverside	57.5	47.0	55.7	38.7

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/3	47	14.5	15.5	8.7
McIntyre	NS			- -	- -
Roach	1/26	48	14.5	14.5	9.8
North Platte River					
Cameron Pass	1/29	66	27.6	23.2	12.9
Columbine Lodge	1/28	63	18.7	18.1	13.6
Northgate	1/29	19	4.9	5.3	3.6
Park View	1/27	31	7.8	8.3	5.2
Willow Cr. Pass(B)	1/27	38	10.8	10.3	7.1
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/28	16	4.4	6.4	5.2
Boulder Falls	1/29	30	7.3	11.8	6.6
University Camp	1/29	39	11.6	17.2	10.9
Big Thompson River					
Deer Ridge	1/31	11	4.1	7.0	2.6
Hidden Valley	1/30	31	8.2	11.8	5.9
Lake Irene (B)	1/26	56	18.1	17.2	13.0
Long's Peak	1/30	28	7.6	10.9	5.6
Two Mile	1/29	44	11.8	11.8	7.9
Cache La Poudre					
Bennett Creek	1/29	26	6.5	8.3	- -
Big South	1/31	2	0.6	2.2	1.6
Cameron Pass	1/29	66	27.6	23.2	12.9
Chambers Lake	1/31	25	8.4	11.0	5.2
Deadman Hill	2/3	47	14.5	15.5	8.7
Hour Glass Lake	1/29	22	5.6	- -	3.1
Joe Wright	1/29	53	18.5	21.1	- -
Lost Lake	1/31	33	10.2	12.2	7.2
Pine Creek	1/29	6	1.5	1.3	1.2
Red Feather	1/29	22	6.3	5.7	3.8
Clear Creek					
Baltimore (B)	1/28	16	4.4	6.4	5.2
Berthoud Falls	1/28	40	10.4	12.6	8.0
Empire	1/28	22	4.6	8.6	4.3
Grizzly Peak (B)	1/28	52	14.2	17.5	9.8
Loveland Lift	1/29	33	6.5	18.3	12.9
Loveland Pass	1/29	39	9.0	17.4	8.5
Saint Vrain River					
Copeland Lake	1/28	8	2.0	4.1	2.6
Ward	1/28	15	3.9	6.0	3.4
Wild Basin	NS			9.1	6.9
South Platte River					
Como	1/28	15	3.1	8.4	- -
Geneva Park	1/27	9	1.1	5.9	2.7
Horseshoe Mt.	1/27	25	5.7	9.6	- -
Hoosier Pass	1/29	30	7.1	12.9	7.6
Jefferson Creek	1/28	24	5.3	8.3	5.7
Mosquito	1/27	21	4.7	11.7	- -
Trout Creek Pass	1/27	8	1.6	4.7	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/27	22	6.5	6.3	- -
Cooper Hill (B)	2/1	33	7.7	10.6	- -
East Fork	1/28	24	6.4	10.0	5.6
Four Mile Park	1/29	12	3.2	5.7	3.5
Fremont Pass	1/28	40	10.8	14.6	9.5
Garfield	1/27	26	7.2	9.9	8.4
Hermit Lake	1/27	21	5.8	5.1	- -
Monarch Pass	1/27	31	9.7	14.0	10.3
Tennessee Pass	1/28	22	5.8	9.9	6.2
Twin Lakes Tunnel	1/23	25	5.0	7.6	6.0
Westcliffe	1/27	17	4.3	5.4	- -
Cucharas River					
Blue Lakes	1/27	0	0.0	0.0	2.3
Cucharas Pass	1/27	19	5.7	3.2	- -
LaVeta Pass (B)	1/27	18	4.6	5.0	6.2
Purgatorie River					
Bourbon	1/26	18	5.2	4.1	- -
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/29	15	3.2	1.2	3.9
Summitville	1/27	45	12.3	8.0	11.6
Conejos River					
Cumbres	1/28	37	11.2	6.7	13.2
Platoro	1/28	35	9.6	8.9	12.9
River Springs	NS			- -	4.8
Culebra River					
Brown Cabin	----			4.5	- -
Cottonwood (B)	----			3.2	- -
Culebra	1/28	18	4.7	4.1	5.7
LaVeta Pass (B)	1/27	18	4.6	5.0	6.2
Trinchera (B)	----			5.8	- -
Rio Grande					
Cochetopa Pass	1/26	17	3.4	6.7	3.4
Grayback	NS			- -	- -
Hiway	1/28	46	15.1	11.7	15.7
Lake Humphrey	1/27	12	1.8	3.3	5.6
Love Lake	1/28	17	3.3	5.2	- -
Pass Creek	1/28	25	6.9	3.7	8.9
Pool Table	1/28	8	1.0	3.7	6.1
Porcupine	1/29	21	5.0	7.0	8.2
Santa Maria	1/28	6	0.9	1.8	3.4
Upper Rio Grande	1/29	16	3.7	2.6	5.4
Wolf Creek Pass	1/28	51	16.1	11.8	17.8
Wolf Cr. Sum. (B)	1/28	54	17.3	15.0	17.7
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	2/3	2	0.1	0.6	2.6
Rio Chama					
Bateman	1/27	25	6.0	6.4	7.0
Capulin Peak	1/28	12	2.8	2.8	3.3
Chama Divide	1/29	8	1.8	0.0	3.3
Chamita	1/28	21	3.7	3.4	5.0
Rio Grande					
Aspen Grove	NS			- -	- -
Big Tesuque	1/28	4	1.0	2.2	3.7
Blue Bird Mesa	1/27	3	0.7	2.0	3.8
Cordova	NS			4.3	6.3
Elk Cabin	1/29	1	0.2	0.8	2.9
Fenton Hill	1/28	3	1.0	1.2	3.0
Pajarito Peak	1/29	0	0.0	0.9	1.3
Payrole	1/29	19	4.3	2.9	5.9
Quemazon	1/28	15	3.1	4.2	6.5
Rio En Medio	1/28	14	3.8	3.8	6.1
Sandoval	1/28	3	0.8	1.2	3.7
Taos Canyon	1/27	0	0.0	1.4	3.4
Tres Ritos	1/29	2	0.6	2.9	3.5
Rio Hondo					
Twinning	1/27	10	2.4	6.3	- -
Red River					
Hematite Park (B)	1/26	0	0.0	1.8	3.4
Red River	1/26	10	2.3	2.2	4.4

NOTE:
NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/28	19	5.9	3.6	8.0
Lemon	1/29	18	5.2	1.3	- -
Mineral Creek	1/28	34	10.0	10.2	8.9
Molas Lake	1/29	28	8.3	7.7	8.4
Purgatory	1/28	38	11.0	11.7	- -
Red Mountain Pass	1/28	60	20.7	21.3	17.0
Silverton Sub-Sta.	1/28	10	3.1	2.8	4.8
Spud Mountain	1/28	40	13.1	11.6	15.0
Dolores River					
Lizzard Head	1/29	37	10.9	10.8	9.4
Lone Cone	1/29	36	11.1	10.2	- -
Rico	1/29	12	4.4	4.4	5.0
Telluride	1/28	22	5.5	6.3	4.5
Trout Lake	1/28	32	9.3	9.3	7.6
San Juan River					
Chama Divide (B)	1/29	8	1.8	0.0	3.3
Chamita (B)	1/28	21	3.7	3.4	5.0
Upper San Juan	1/28	54	17.8	11.0	19.4
Wolf Cr. Pass (B)	1/28	51	16.1	11.8	17.8
Wolf Cr. Summit	1/28	54	17.3	15.0	17.7
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/28	47	16.1	14.5	11.5
Blue Mesa	NS			- -	- -
Butte	1/26	35	9.2	12.3	- -
Cochetopa Pass (B)	1/26	17	3.4	6.7	3.4
Crested Butte	1/28	28	6.9	9.1	7.5
Keystone	1/28	48	13.9	15.2	12.6
Lake City	1/29	21	2.9	7.3	- -
Mesa Lakes (B)	1/29	39	12.0	11.2	10.3
McClure Pass	1/27	34	9.9	10.2	11.6
Park Cone	1/27	27	5.9	10.2	6.2
Park Reservoir	1/28	52	17.9	14.1	14.1
Porphyry Creek	1/27	34	9.5	14.1	10.1
Tomichi	1/27	29	8.3	11.4	7.5
Surface Creek					
Alexander Lake	1/28	47	16.1	14.5	11.5
Mesa Lakes (B)	1/29	39	12.0	11.2	10.3
Park Reservoir	1/28	52	17.9	14.1	14.1
Uncompahgre River					
Ironton Park	1/28	28	9.2	11.1	7.6
Red Mountain Pass	1/28	60	20.7	21.3	17.0
Telluride (B)	1/28	22	5.5	6.3	4.5
COLORADO BASIN					
Blue River					
Blue River	1/29	22	4.7	8.1	5.1
Fremont Pass	1/28	40	10.8	14.6	9.5
Frisco	1/28	22	5.2	7.9	4.3
Grizzly Peak	1/28	52	14.2	17.5	9.8
Hoosier Pass (B)	1/29	30	7.1	12.9	7.6
Shrine Pass	1/28	50	13.8	16.2	9.6
Snake River	1/28	28	6.6	9.7	4.7
Summit Ranch	1/28	22	5.6	5.9	4.4
Colorado River					
Arrow	1/29	34	10.3	12.1	6.4
Berthoud Pass	1/28	46	14.0	12.9	8.3
Berthoud Summit	1/28	50	14.8	17.8	10.8
Cooper Hill	2/1	33	7.7	10.6	- -
Fiddler Gulch	NS			- -	8.7
Glenmar Ranch	1/27	28	7.9	6.4	4.7
Gore Pass	1/28	32	8.8	8.0	5.9
Grand Lake	1/27	27	6.4	7.0	4.8
Lake Irene	1/26	56	18.1	17.2	13.0
Lapland	1/27	35	9.9	- -	- -
Lulu	NS			- -	- -
Lynx Pass	1/28	39	11.0	9.0	6.6
McKenzie Gulch	1/29	17	3.5	3.9	3.4
Middle Fork	1/27	29	8.3	7.3	5.4
Milner	1/26	41	11.8	12.1	8.7
North Inlet	1/27	27	7.2	7.6	5.3
Pando	1/28	22	5.8	9.5	5.7
Phantom Valley	1/26	32	9.1	9.4	6.1
Ranch Creek	1/29	31	8.1	8.5	5.1
Tennessee Pass (B)	1/28	22	5.8	9.9	6.2
Vail Pass	1/28	48	13.9	17.3	10.0
Vasquez	1/27	42	11.6	11.6	6.9
Roaring Fork River					
Aspen	1/28	41	12.3	13.0	8.9
Chapman	1/28	41	10.4	13.3	- -
Independence Pass	1/23	42	9.4	12.2	9.5
Ivanhoe	1/28	46	13.9	16.3	9.6
Kiln	1/28	32	7.0	9.6	- -
Last Chance	1/28	27	7.6	7.8	- -
Lift	1/28	42	12.0	12.9	10.3
McClure Pass	1/27	34	9.9	10.2	11.6
Nast	1/28	20	4.9	5.6	3.7
North Lost Trail	1/27	34	11.2	10.6	9.5
Williams Fork River					
Glenmar Ranch	1/27	28	7.9	6.4	4.7
Jones Pass	1/28	44	13.4	14.8	7.8
Middle Fork	1/27	29	8.3	7.3	5.4
Willow Creek					
Granby	1/27	23	6.0	6.8	4.6
Willow Creek Pass	1/27	38	10.8	10.3	7.1
Plateau Creek					
Mesa Lakes	1/29	39	12.0	11.2	10.3
Park Reservoir	1/28	52	17.9	14.1	14.1
Trickle Divide	1/20	54	18.3	14.9	15.3
YAMPA BASIN					
Elk River					
Clark	1/29	25	5.6	7.0	8.3
Elk River	1/29	46	14.1	12.5	11.1
Hahn's Peak	1/29	38	11.6	9.8	- -
White River					
Burro Mountain	1/27	45	13.9	12.5	10.7
Rio Blanco	1/28	40	12.2	12.6	8.9
Yampa River					
Bear River	NS			- -	- -
Columbine Lodge(B)	1/28	63	18.7	18.1	13.6
Dry Lake	1/27	49	14.1	13.7	12.2
Lynx Pass (B)	1/28	39	11.0	9.0	6.6
Rabbit Ears	1/28	66	20.1	22.4	15.9
Yampa View	1/28	40	16.8	12.8	8.8

NOTE:

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/6/70	11.1	6.2	7.4	6.4
Willow Pass	11/3/70	9.5	8.1	6.4	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/29/70	6.9	4.8	3.4	3.7
Big Thompson River					
Beaver Dam	10/29/70	7.1	5.1	5.5	3.8
Guard Station	10/29/70	6.9	4.1	3.4	3.4
Two Mile	10/29/70	9.1	5.2	6.9	5.5
Clear Creek					
Clear Creek	11/6/70	9.5	8.1	7.7	7.1
Hoop Creek	11/6/70	4.9	3.4	3.3	2.9
Cache La Poudre River					
Feather	10/30/70	10.1	4.5	8.3	4.5
Laramie Road	10/30/70	12.4	7.7	9.9	7.8
South Platte River					
Hoosier Pass	11/12/70	7.8	5.6	4.8	4.9
Kenosha Pass	11/14/70	4.4	2.6	2.7	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/27/70	6.7	4.4	4.4	3.9
Leadville	10/28/70	7.8	3.3	4.8	4.2
Twin Lakes Tunnel	10/28/70	4.5	1.7	1.6	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/20/70	10.7	4.9	7.1	5.5
Rio Grande					
Alberta Park	11/19/70	8.2	5.7	4.8	5.0
Bristol View	11/19/70	6.1	5.0	5.9	3.9
LaVeta	11/20/70	11.9	9.4	8.2	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	10/31/70	6.7	1.9	0.7	2.5
Chamita	10/26/70	8.0	1.2	3.4	2.4
Rio Grande					
Aqua Piedra	10/21/70	7.2	3.7	5.8	3.1
Big Tesuque	11/12/70	3.7	2.1	0.8	1.5
Fenton Hill	10/19/70	6.5	2.7	5.7	3.8
Rio En Medio	10/21/70	3.5	2.1	0.5	1.4
Taos Canyon	11/9/70	3.3	2.2	2.5	2.3
Red River					
Red River Summit	11/9/70	4.8	1.6	2.0	2.2
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/10/70	9.1	5.5	5.9	6.3
Mineral Creek	11/10/70	5.7	3.5	2.6	3.7
Molas Lake	11/10/70	9.4	6.6	4.5	4.6
Dolores River					
Dolores	11/13/70	19.6	8.0	8.2	6.7
Lizzard Head	11/13/70	11.8	4.6	4.4	8.3
Rico	11/13/70	13.8	10.9	10.4	9.9

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
Gunnison River					
King	10/27/70	3.3	2.3	2.2	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/12/70	4.2	3.4	3.1	2.8
Colorado River					
Berthoud Pass	11/6/70	3.9	3.1	3.2	2.8
Gore	11/5/70	4.9	3.0	3.3	2.5
Grand Mesa	10/9/70	12.5	11.1	9.3	9.3
Ranch Creek	11/13/70	8.7	5.7	5.7	6.0
Vail	11/6/70	12.3	7.0	9.5	6.9
Roaring Fork River					
Placita	11/20/70	9.3	7.0	6.5	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/6/70	19.0	12.7	6.1	11.8

ALL PROFILES 4 FEET DEEP

USDA SCS PORTLAND OREG 1967 MT-L-1864

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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FORT COLLINS, COLORADO 80521

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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"

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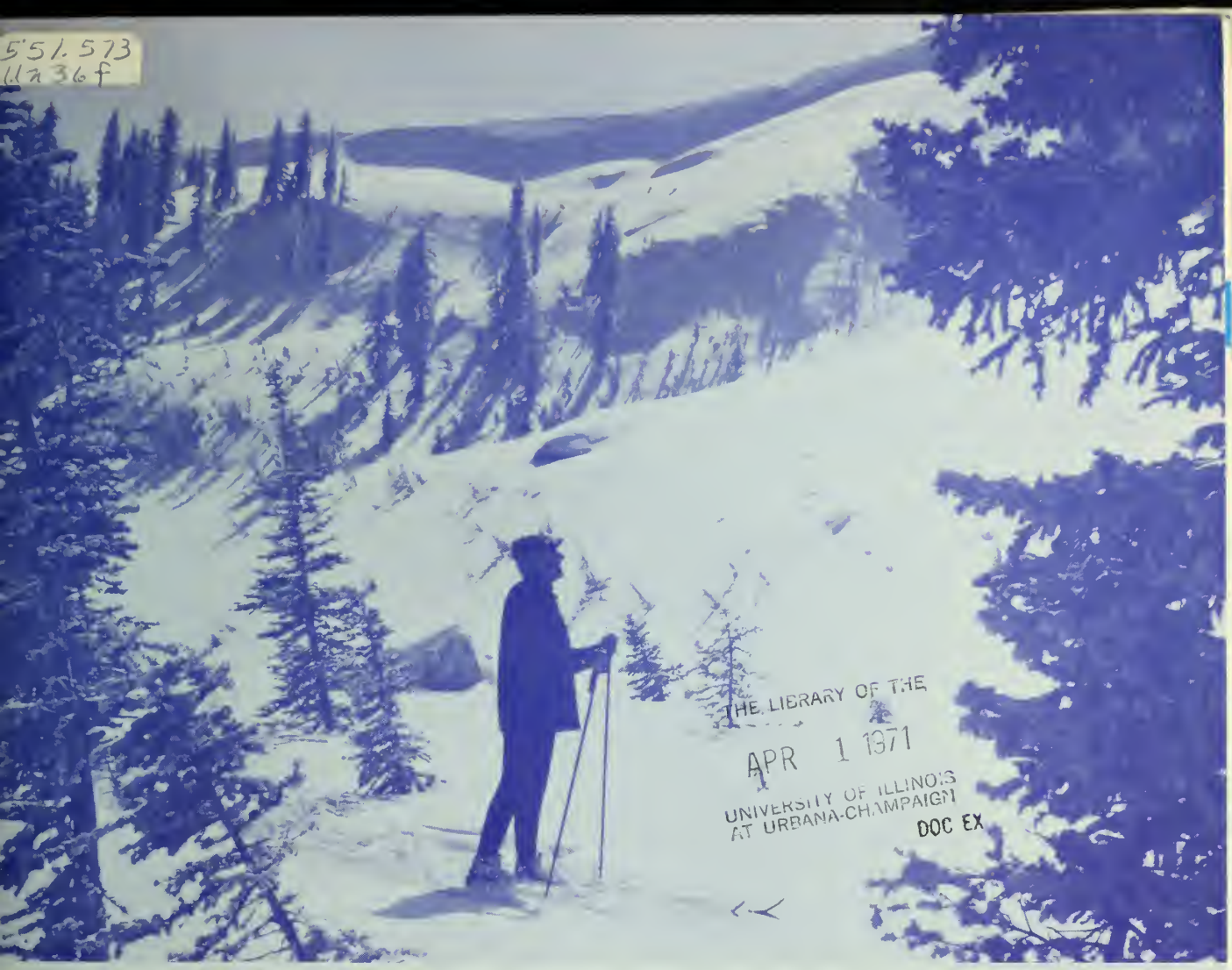

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
MAR. 1, 1971

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG. 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

March 1, 1971

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

March 1, 1971

SNOWFALL DURING FEBRUARY WAS NEAR NORMAL SO THE SAME GENERAL SNOW PATTERN AS FEBRUARY 1st STILL EXISTS.

NORTHERN AREAS OF COLORADO HAVE GOOD SNOW. THIS TAPERS OFF TO THE SOUTH. IN NEW MEXICO THE SNOW PACK IS POOR.

STREAMFLOWS WILL FOLLOW THE SAME PATTERN AS THE SNOWFALL.

RESERVOIR STORAGE IS GOOD IN COLORADO AND JUST AVERAGE IN NEW MEXICO.

SOIL MOISTURE IN THE IRRIGATED AREAS OF COLORADO RANGES FROM FAIR TO GOOD. IN NEW MEXICO REPORTS INDICATE SOIL MOISTURE IS POOR TO FAIR.

MORE SNOW IS NEEDED IN SOUTHERN COLORADO AND NEW MEXICO.

COLORADO -- WATER SUPPLIES WILL VARY WIDELY OVER COLORADO THIS SUMMER. THE NORTHERN THIRD OF THE STATE SHOULD HAVE EXCELLENT SUPPLIES. THE SNOW PACK IS HIGH, SOIL MOISTURE GOOD AND CARRY-OVER STORAGE MUCH ABOVE NORMAL.

THE MIDDLE PORTION OF THE STATE SHOULD HAVE NEAR NORMAL SUPPLIES. THIS AREA ALSO HAS GOOD STORAGE AND AVERAGE SOIL MOISTURE.

THE SOUTHERN THIRD MAY HAVE SOME SHORTAGES. SOIL MOISTURE IS AVERAGE AND CARRY-OVER STORAGE GOOD, BUT DIRECT FLOW FROM STREAMS MAY BE BELOW AVERAGE. CONSIDERABLY MORE SNOW IS NEEDED IN THIS AREA TO ASSURE ADEQUATE WATER THIS SUMMER.

NEW MEXICO -- UNLESS THE REMAINDER OF THE YEAR PRODUCES MUCH ABOVE NORMAL SNOW, WATER SUPPLIES WILL BE SHORT IN NEW MEXICO. CURRENT SNOW PACK IS MUCH BELOW NORMAL. SOME SNOW COURSES ARE A MINIMUM OF RECORD. VALLEY SOIL MOISTURE IS REPORTED AS POOR TO FAIR. MOUNTAIN SOILS HAVE NEAR NORMAL MOISTURE.

RESERVOIR CARRY-OVER STORAGE IS NEAR NORMAL, BUT LESS THAN LAST YEAR.

ABOVE NORMAL SNOWFALL IS BADLY NEEDED.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK ON THE SOUTH PLATTE DRAINAGE IS ABOVE AVERAGE ON ALL TRIBUTARIES EXCEPT THE HEADWATERS OF THE SOUTH PLATTE. STREAMFLOW FORECASTS RANGE FROM 115 PERCENT ON THE BIG THOMPSON TO 122 PERCENT ON CLEAR CREEK AND BOULDER CREEK. RESERVOIR STORAGE IS 139 PERCENT OF AVERAGE AND 105 PERCENT OF LAST YEAR SO WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD. WINDS HAVE DRIED THE SURFACE SOILS.

This report prepared by
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DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (2)	115	115	100
Boulder at Orodell	60	122	49
Cache La Poudre at Canon Mouth (1)	250	116	215
Clear Cr. at Golden	145	122	119
Saint Vrain at Lyons	83	119	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minu diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	87	126
Boulder	3	77	109
Cache La Poudre	8	99	143
Clear Creek	6	80	116
Saint Vrain	2	69	104
South Platte	3	62	92

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	91	113
Boulder	1	141	130
Cache La Poudre	2	67	100
Clear Creek	2	104	115
Saint Vrain	2	111	132
South Platte	2	109	109

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Anterio	33.0	15.9	15.9	10.6
Barr Lake	32.2	24.0	24.9	18.9
Black Hollow	8.0	4.2	4.0	3.3
Boyd Lake	44.0	44.8	30.4	27.8
Cache La Poudre	9.5	7.9	8.4	7.0
Carter Lake	108.9	100.1	91.3	71.3
Chambers Lake	8.8	4.2	3.0	2.7
Cheesman	79.0	72.6	79.1	46.4
Cobb Lake	34.0	22.1	18.5	9.9
Eleven Mile	97.8	96.4	96.4	72.0
Fossil Creek	11.6	9.1	9.9	6.1
Gross	43.1	36.0	37.4	24.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	1.5	5.9	3.8
Horsetooth	143.5	106.3	92.7	93.6
Lake Loveland	14.3	10.0	12.0	8.1
Lone Tree	9.2	8.2	8.1	6.2
Mariano	5.4	5.1	5.1	3.9
Marshall	10.3	6.5	5.4	2.5
Marston	18.0	16.9	16.0	14.3
Milton	24.4	14.0	13.4	9.5
Standley	42.0	23.3	23.0	9.8
Terry Lake	8.2	6.4	0.0	4.9
Union	12.7	12.7	11.3	7.5
Windsor	18.6	6.4	13.0	8.4

† 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

SNOWFALL WAS JUST BELOW NORMAL DURING FEBRUARY ON THE ARKANSAS DRAINAGE. FORECASTS OF SUMMER FLOWS WERE REDUCED SLIGHTLY. THE SOUTHERN TRIBUTARIES, THE CUCHARAS AND PURGATOIRE ARE BEING FORECAST AT 75 AND 86 PERCENT OF NORMAL RESPECTIVELY.

CARRY-OVER STORAGE IS 170 PERCENT OF NORMAL AND SIMILAR TO LAST YEAR.

SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD IN THE IRRIGATED AREAS.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	270	91	298
Arkansas at Salida (1)	275	89	309
Cucharas nr LaVeta	9	75	12
Purgatoire at Trinidad	40	86	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape	Avg.	Fair
Hardscrable Creek	Avg.	Fair
Huerfano	Avg.	Fair
Monument Creek	Avg.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestak Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	83	103
Cucharas and Purgatoire	3	100	71

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	87	90
Cucharas and Purgatoire	1	114	131

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	47.9	17.8	11.5
Clear Creek	11.4	5.4	10.2	6.6
Cucharas	40.0		1.5	6.9
Great Plains	150.0	108.7	118.4	35.4
Horse Creek	26.9	4.3	20.4	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	26.5	46.8	85.1
Meredith	41.9	26.0	25.4	9.0
Model	15.0	1.9	1.4	3.1
Turquoise	130.0	50.0	42.8	7.0
Twin Lakes	57.9	41.8	36.6	20.1

+ 1953-1967 period.

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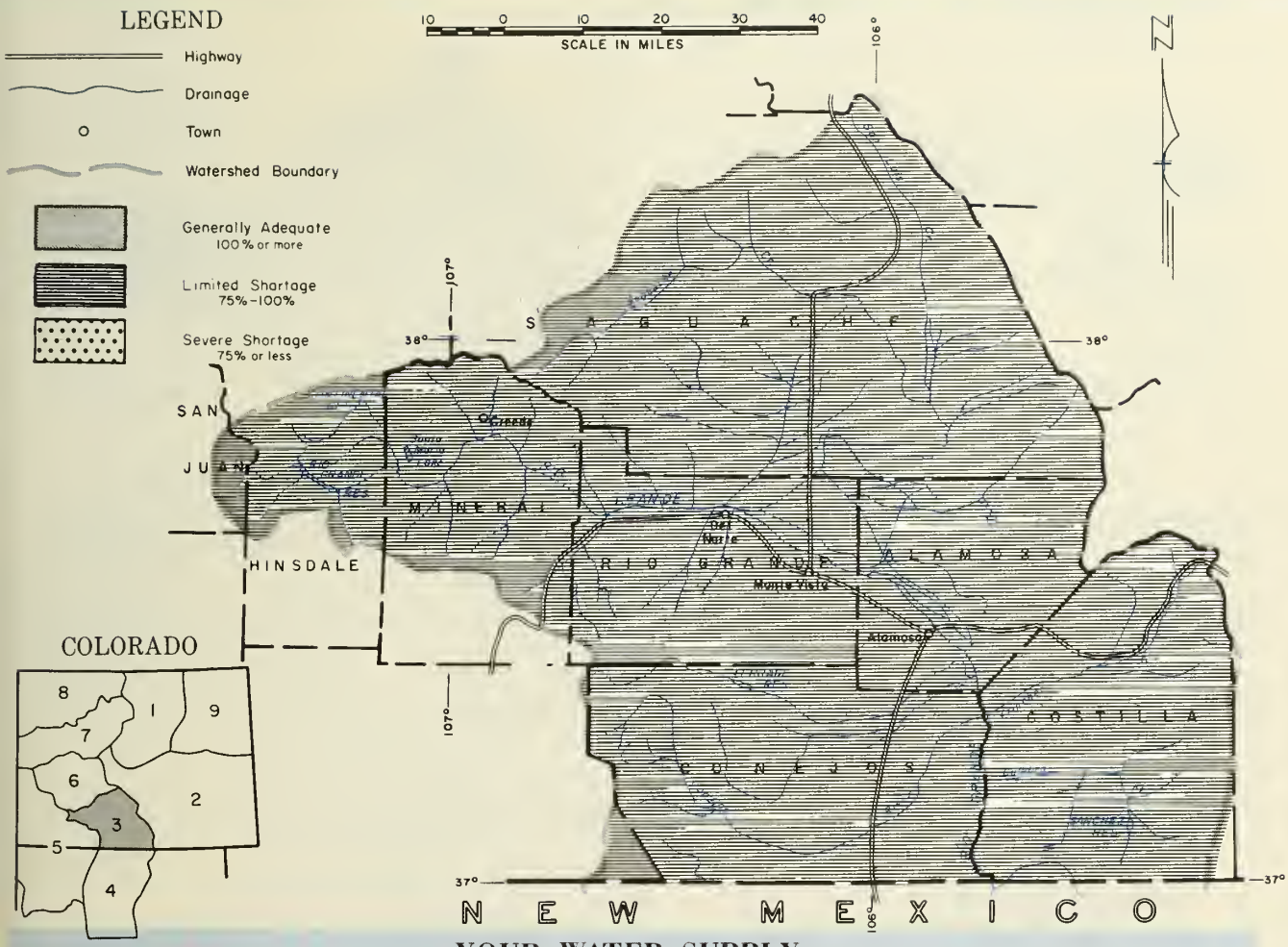
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES WILL BE LESS THAN NORMAL UNLESS SNOWFALL IS ABOVE NORMAL FOR THE REST OF THE YEAR.

CURRENT SNOW RANGES FROM 76 PERCENT OF NORMAL ON THE CONEJOS TO 94 PERCENT ON THE ALAMOSA.

CARRY-OVER STORAGE IS GOOD AND WILL BE OF SOME ASSISTANCE THIS SUMMER.

MOUNTAIN SOILS ARE WET AND VALLEY SOILS CONTAIN MORE WATER THAN USUAL.

This report prepared by
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DENVER, COLORADO
DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	46	74	62
Conejos nr Mogote (1)	135	74	182
Culebra at San Luis (2)	16	84	19
Rio Gr. at 30 Mile Bridge (3)	100	85	117
Rio Gr. nr Del Norte (3)			
So. Fk. at So. Fk.	95	86	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Avg.	Fair
Trinchera Creek	Avg.	Fair

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	190	94
Conejos	3	157	76
Culebra	2	113	79
Rio Grande	10	122	81

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	100	120
Conejos	1	69	89
Culebra	2	108	117
Rio Grande	3	106	125

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	8.5	6.2	4.4
Platoro	60.0	2.9	3.0	7.1
Rio Grande	45.8	40.0	27.7	12.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	56.4	19.0	10.6
Santa Maria	45.0	10.1	6.3	5.5
Terrace	17.7	0.0	11.0	3.7

+ 1953-1967 period.

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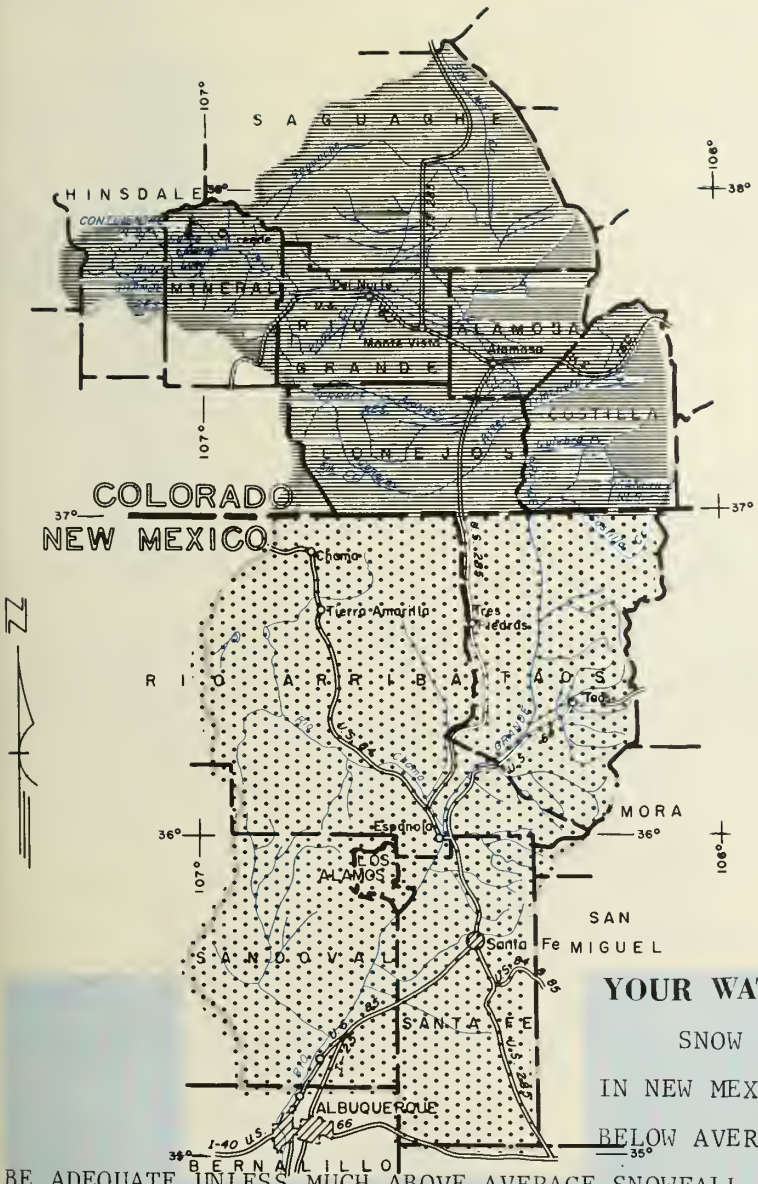
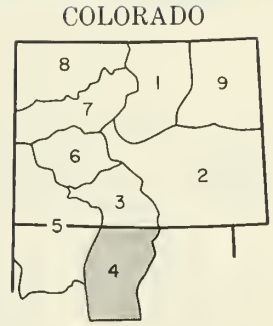
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

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SCALE IN MILES

YOUR WATER SUPPLY

SNOW PACK CONTINUES TO BE DEFICIENT IN NEW MEXICO. STREAMFLOW FORECASTS ARE BELOW AVERAGE SO WATER SUPPLIES WILL NOT BE ADEQUATE UNLESS MUCH ABOVE AVERAGE SNOWFALL OCCURS DURING THE REMAINDER OF THE SEASON. RESERVOIR STORAGE IS 94 PERCENT OF THE 1953-67 AVERAGE AND ONLY 69 PERCENT OF LAST YEARS. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS POOR TO FAIR.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar–Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	8	44	18
Pecos at Pecos	22	54	41
Rio Chama to ElVado	140	74	188
Rio Gr. at Otowi (2)	380	74	513
Rio Gr. at San Mar (2)	260	78	334
Rio Hondo nr Valdez	7	47	15
Red R. at mouth nr Questa	22	69	32

The forecast of the Rio Grande at San Marcial is 40 *% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.*

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Fair	Poor
Jemez River	Fair	Poor
Mora River	Fair	Poor
Nambe Creek	Fair	Poor
Rio Ojo Caliante	Fair	Poor
Rio Pueblo de Taos	Fair	Poor
Santa Fe Creek	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	300	19
Rio Chama	4	149	72
Rio Grande, N.M.	11	100	46
Rio Hondo	1	57	--
Red River	2	86	47

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	116	88
Rio Chama	1	70	68
Rio Grande	4	130	104
Red River	1	94	79

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	57	80	76
Caballo	344	78	84	81
Conchas	273	154	232	163
Elephant Butte	2195	362	530	370

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
ElVado	195	1	1	4
McMillen-Avalon	32	18	38	20

+ 1953-1967 period.

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OFFICIAL BUSINESS

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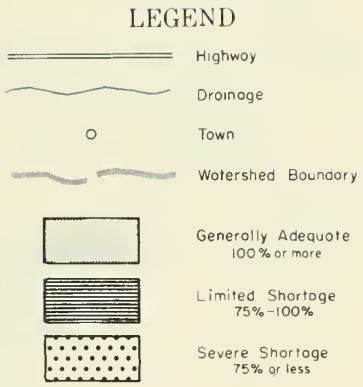
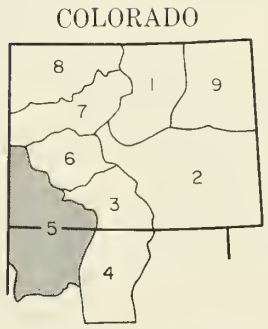
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





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SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW PACK IN SOUTHWESTERN COLORADO IS SLIGHTLY LESS THAN THE 15 YEAR AVERAGE AND WILL PRODUCE LESS THAN NORMAL RUNOFF UNLESS THE REMAINDER OF THE YEAR HAS ABOVE NORMAL SNOW PACK. THIS YEAR'S SNOW IS SLIGHTLY BETTER THAN LAST YEAR. CURRENT RESERVOIR STORAGE IS SLIGHTLY BETTER THAN NORMAL.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	385	94	409
Dolores at Dolores	200	87	231
La Plata at Hesperus	17	71	24
Los Pinos at Bayfield (1)	140	72	194
Piedra Cr. at Piedra	130	80	163
San Juan at Carracas	280	74	379
Inflow to Navajo Res. (1) (Apr-Jul)	470	76	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Fair
Mancos	Avg.	Fair
San Miguel	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	130	99
Dolores	4	113	110
San Juan	5	144	82

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	120	107
Dolores	3	102	94
San Juan	2	105	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	14	13	7
Lemon	40	26	30	15
Navajo	1036	855	925	537
Vallecito	126	74	75	48

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

NEAR NORMAL RUNOFF IS EXPECTED ON THE GUNNISON RIVER AND ITS TRIBUTARIES. SNOWFALL DURING FEBRUARY WAS JUST SLIGHTLY ABOVE THE 15 YEAR AVERAGE.

COMBINED STORAGE IN BLUE MESA, MORROW POINT AND TAYLOR RESERVOIRS IS 631,000 a.f. OR JUST SLIGHTLY LESS THAN LAST YEAR. MORROW POINT AND TAYLOR ARE NEARLY FULL.

MOUNTAIN SOILS ARE GENERALLY WETTER THAN NORMAL AND VALLEY SOILS ARE IN GOOD CONDITION.

This report prepared by
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DENVER, COLORADO
GRAND JUNCTION, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison R. inflow to Blue Mesa Res.	680	89	767
Gunnison nr Gr. Junction	930	82	1137
Surface Cr. nr Cedaridge	16	100	16
Uncompahgre at Colona	115	89	129

(1) Observed flow plus change in storage in Toylor, Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Avg.
Taylor	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	94	100
Surface Creek	3	118	105
Uncompahgre	3	107	122

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	105	121
Surface Creek	1	119	119
Uncompahgre	1	119	119

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	415	489	--
Morrow Point	121	117	91	--
Taylor	106	99	97	56

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period

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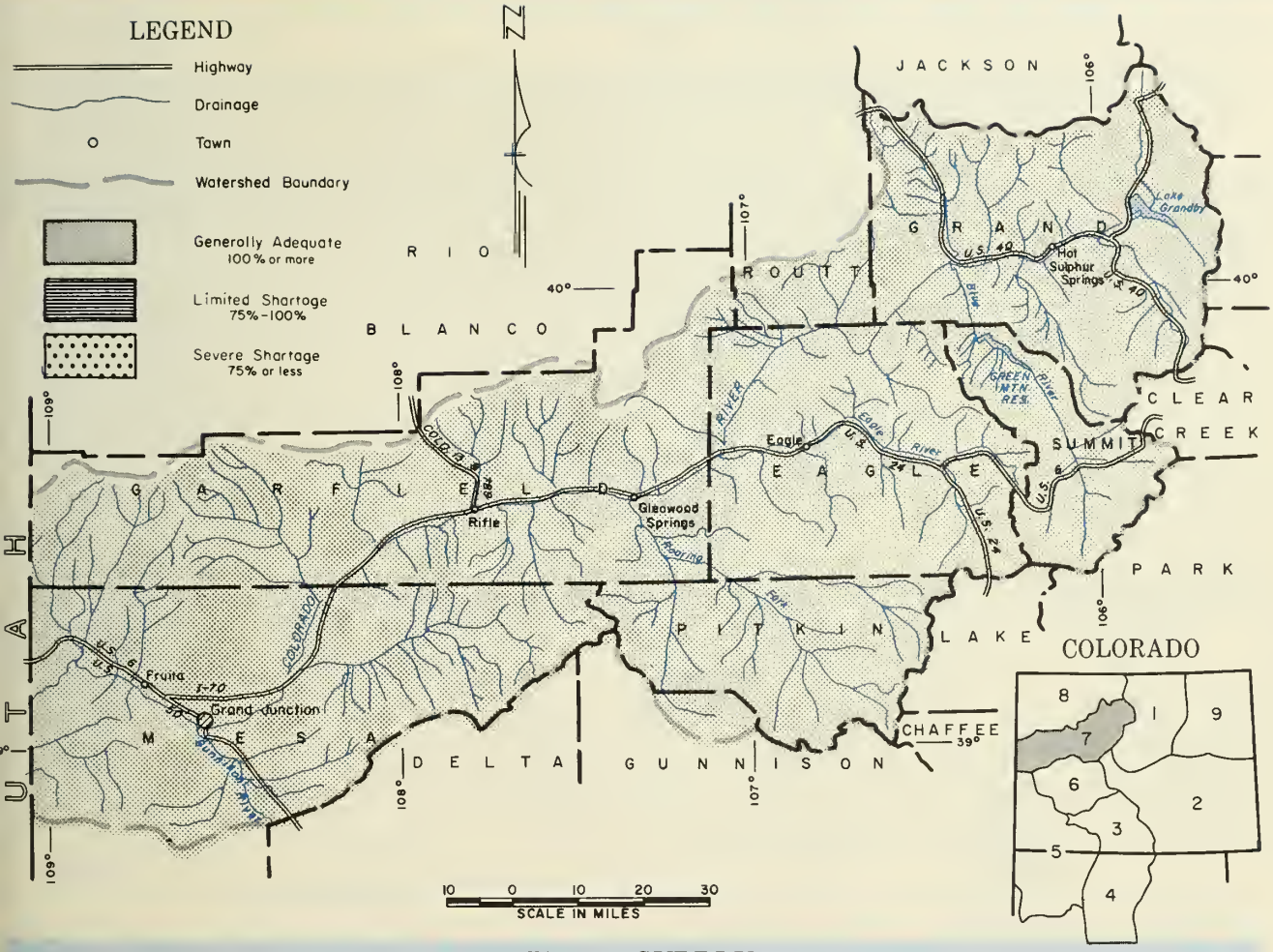
FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

MARCH 1 SNOW PACK IS AVERAGE TO WELL ABOVE AVERAGE ON ALL WATERSHEDS. STREAMS IN THIS AREA ARE EXPECTED TO HAVE ABOVE AVERAGE APRIL-SEPTEMBER STREAMFLOW RANGING FROM AVERAGE ON THE ROARING FORK TO 158 PERCENT ON THE WILLIAMS FORK. ASSUMING AVERAGE CONDITIONS THE REMAINDER OF THE WINTER AND THIS SPRING, WATER SUPPLIES WILL BE ADEQUATE.

RESERVOIR STORAGE IS ABOVE AVERAGE AND GREATER THAN LAST YEAR. SOIL MOISTURE CONDITIONS ARE GOOD.

This report prepared by
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Issued by
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R.L. PORTER, AREA CONSERVATIONIST, GLENWOOD SPRINGS, COLORADO
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue ab Gr. Mt. (1)	265	112	236
Colo. Rv. inflow to Granby Res. (2)	275	126	219
Colo. Rv. nr Dotsero (3)	1450	105	1375
Roar. Fk. at GlSpr. (4)	700	101	692
Wm. Fk nr Par. (5)	95	158	60
Will. Cr. inflow to Will. Cr. Res.	70	152	46
Colo. nr Cameo (6)	2360	106	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	79	119
Colorado	21	99	136
Plateau	3	126	104
Roaring Fork	7	107	117
Williams Fork	3	109	157
Willow	2	102	135

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	110	121
Colorado	5	96	113
Roaring Fork	1	108	135
Willow	1	127	121

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	246	239	130
Granby	466	367	264	233
Green Mountain	147	74	71	63
Homestake	43	24	18	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	71	75	--
Williams Fork	97	49	46	27
Willow Creek	9	7	7	6
Vega	32	17	14	11

+ 1953-1967 period.

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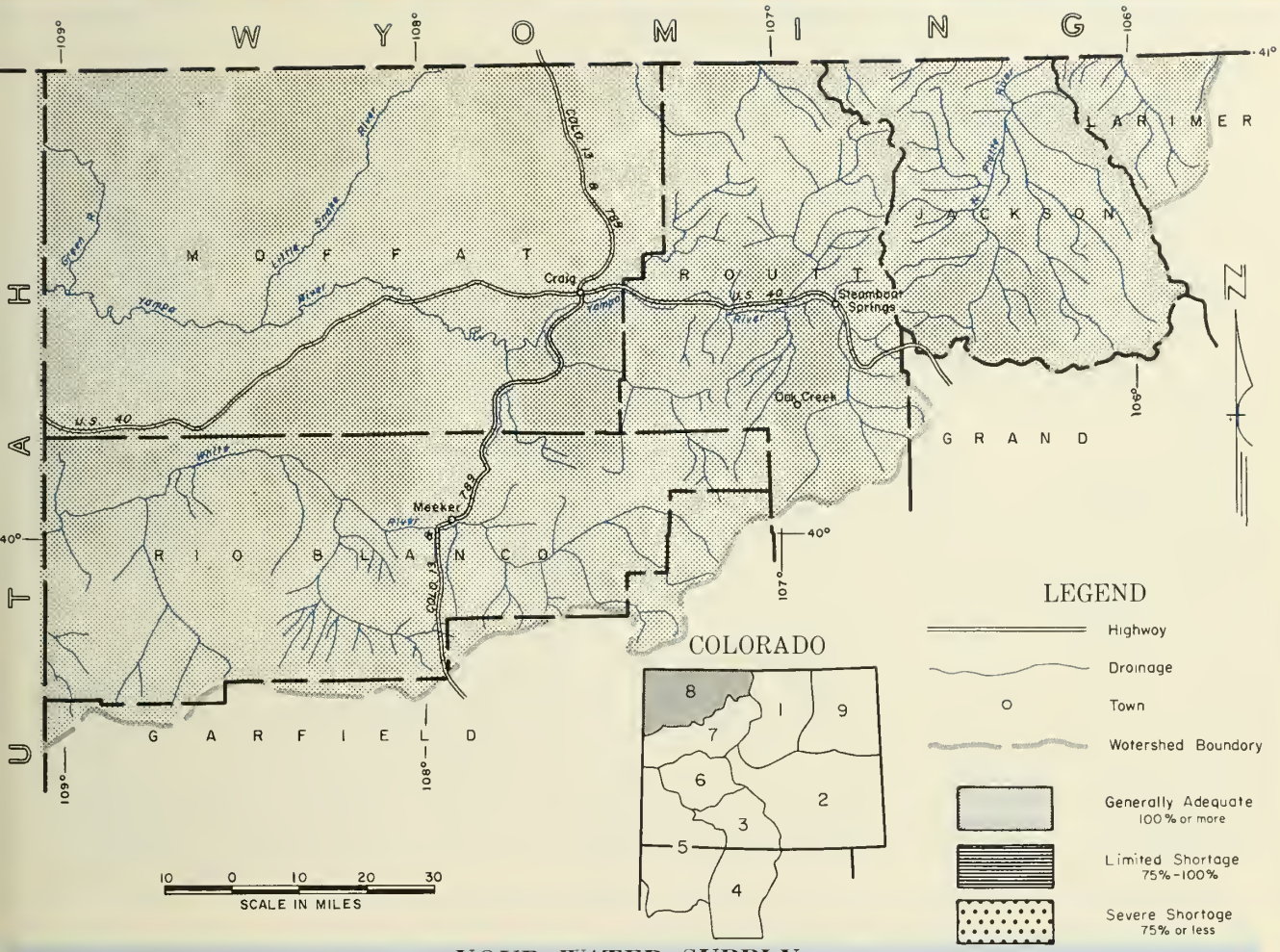
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE WATER SUPPLY OUTLOOK IN THIS AREA IS EXCELLENT WITH APRIL-SEPTEMBER STREAMFLOW FORECASTS RANGING FROM 113 PERCENT TO 150 PERCENT OF AVERAGE. SNOWFALL DURING FEBRUARY WAS SOMEWHAT BELOW AVERAGE. HOWEVER, DUE TO THE HEAVY EARLY SNOW PACK PRIOR TO FEBRUARY, THE MARCH 1 SNOW PACK IS SLIGHTLY ABOVE AVERAGE.

MOUNTAIN AND VALLEY SOIL MOISTURE CONDITIONS ARE AVERAGE.

This report prepared by
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DENVER, COLORADO GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	215	113	191
Laramie at Jelm	142	148	104
Little Snake at Lily	425	153	277
No. Platte at Northgate	335	156	215
White nr Meeker	355	121	293
Yampa nr Maybell	1100	129	853
Yampa at Steamboat Springs	350	135	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	110	102
Laramie	2	113	151
North Platte	5	114	149
White	2	111	119
Yampa	5	107	129

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	2	67	100
North Platte	2	104	109
Yampa	1	208	108

+ 1953-1967 period.

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FIRST CLASS MAIL

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK ON THE SOUTH PLATTE DRAINAGE IS ABOVE AVERAGE. STREAMFLOW FORECASTS RANGE FROM 115 PERCENT OF THE 1953-67 AVERAGE ON THE BIG THOMPSON TO 122 PERCENT ON CLEAR CREEK AND BOULDER CREEK. SUMMER WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. RESERVOIR STORAGE IS 129 PERCENT OF AVERAGE AND SLIGHTLY HIGHER THAN LAST YEAR. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD TO FAIR. SURFACE SOILS HAVE DRIED BECAUSE OF WINDS.

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DENVER, COLORADO DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (2)	115	115	100
Boulder at Orodell	60	122	49
Cache La Poudre at Canon Mouth (1)	250	116	215
Clear Cr. at Golden (3)	145	122	119
Saint Vrain at Lyons	83	119	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Exc.	Exc.
South Platte from Ft. Morgan to Sterling	Exc.	Exc.
South Platte below Sterling	Exc.	Exc.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	87	126
Boulder	3	77	109
Cache La Poudre	8	99	143
Clear Creek	6	80	116
Saint Vrain	2	69	104
South Platte	3	62	92

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	91	113
Boulder	1	141	130
Cache La Poudre	2	67	100
Clear Creek	2	104	115
Saint Vrain	2	111	132
South Platte	2	109	109

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	100.1	91.3	71.3
Cheesman	79.0	72.6	79.1	46.4
Eleven Mile	97.8	96.4	96.4	72.0
Empire	37.7	31.2	29.9	27.2
Horsetooth	143.5	106.3	93.3	93.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	34.9	30.5	30.8
Julesburg	28.2	19.8	20.1	20.7
Prewitt	32.8	19.8	25.6	14.5
Point of Rocks	70.0	69.8	66.2	49.9
Riverside	57.5	56.8	53.9	44.6

+ 1953-1967 period.

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FIRST CLASS MAIL

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/1	58	17.5	17.9	12.6
McIntyre	NS			- -	- -
Roach	2/23	65	23.4	18.2	14.4
North Platte River					
Cameron Pass	2/26	90	33.4	27.0	18.8
Columbine Lodge	2/25	77	25.3	23.5	19.6
Northgate	2/26	29	7.5	7.0	5.3
Park View	2/24	40	10.4	9.5	7.2
Willow Cr. Pass(B)	2/24	45	13.8	12.1	9.8
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/25	29	6.5	8.7	5.8
Boulder Falls	2/26	42	11.6	14.6	9.1
University Camp	2/26	54	15.0	19.5	15.6
Big Thompson River					
Deer Ridge	2/25	17	3.4	8.2	3.9
Hidden Valley	2/25	41	10.4	11.3	7.9
Lake Irene (B)	2/23	73	22.1	22.3	18.2
Long's Peak	2/27	39	10.2	11.3	8.0
Two Mile	2/25	55	15.3	17.3	10.9
Cache La Poudre					
Bennett Creek	2/27	33	8.3	9.9	- -
Big South	2/28	3	0.7	2.2	2.4
Cameron Pass	2/26	90	33.4	27.0	18.8
Chambers Lake	2/28	30	10.1	12.3	7.2
Deadman Hill	3/1	58	17.5	17.9	12.6
Hour Glass Lake	2/27	29	6.7	9.4	5.1
Joe Wright	2/26	80	24.9	25.1	- -
Lost Lake	2/28	44	12.8	14.2	9.6
Pine Creek	2/26	8	1.5	1.1	1.6
Red Feather	2/26	33	7.3	6.9	5.6
Clear Creek					
Baltimore (B)	2/25	29	6.5	8.7	5.8
Berthoud Falls	2/25	54	12.8	15.6	11.5
Empire	2/25	27	7.0	9.7	6.0
Grizzly Peak (B)	2/25	64	19.1	23.2	13.4
Loveland Lift	2/26	52	15.9	20.6	17.7
Loveland Pass	2/26	57	16.4	19.4	12.3
Saint Vrain River					
Copeland Lake	2/24	16	3.4	5.6	3.7
Ward	2/25	24	5.4	7.1	4.8
Wild Basin	2/24	40	9.9	- -	9.7
South Platte River					
Como	2/24	26	5.3	9.4	- -
Geneva Park	2/25	13	1.9	6.0	3.1
Horseshoe Mt.	2/23	43	8.1	12.4	- -
Hoosier Pass	2/25	41	9.6	13.9	10.5
Jefferson Creek	2/24	35	7.8	11.0	7.4
Mosquito	2/23	34	6.6	13.0	- -
Trout Creek Pass	2/23	14	2.1	4.9	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/25	31	7.1	6.2	4.8
Cooper Hill (B)	3/1	46	9.3	12.8	8.5
East Fork	2/26	35	8.8	11.8	7.6
Four Mile Park	2/25	19	3.9	6.7	4.6
Fremont Pass	2/26	56	14.9	17.0	12.4
Garfield	2/25	40	10.9	11.4	11.4
Hermit Lake	2/25	28	7.6	6.1	- -
Monarch Pass	2/25	46	13.3	15.0	14.3
Tennessee Pass	2/25	35	7.4	10.3	8.5
Twin Lakes Tunnel	2/26	33	7.7	10.9	8.6
Westcliffe	2/25	23	5.8	5.0	5.7
Cucharas River					
Blue Lakes	2/25	5	0.9	2.6	3.5
Cucharas Pass	2/25	22	6.1	5.8	- -
LaVeta Pass (B)	2/25	21	6.2	5.0	7.8
Purgatorie River					
Bourbon	2/26	25	5.5	5.0	6.4
RIO GRANDE BASIN-Colo.					
Alamosa River					
Silver Lakes	2/24	17	3.5	1.7	5.5
Summitville	3/1	58	15.3	8.2	14.6
Conejos River					
Cumbres	2/25	44	13.9	6.2	16.5
Platoro	2/25	43	11.6	9.4	13.8
River Springs	2/26	21	3.8	1.8	5.8
Culebra River					
Brown Cabin	2/27	1	0.1	3.1	- -
Cottonwood (B)				- -	- -
Culebra	2/25	25	5.8	5.6	7.3
LaVeta Pass (B)	2/25	21	6.2	5.0	7.8
Trinchera (B)	2/25	28	7.4	5.4	- -
Rio Grande					
Cochetopa Pass	2/25	24	5.0	8.4	4.5
Grayback	NS			- -	- -
Hiway	2/26	59	17.1	13.3	21.4
Lake Humphrey	3/1	23	4.0	2.9	6.2
Love Lake	2/25	30	5.6	4.0	- -
Pass Creek	2/26	32	7.8	4.2	10.8
Pool Table	2/25	16	2.4	4.2	5.9
Porcupine	2/26	33	6.9	7.4	8.7
Santa Maria	2/25	12	2.3	1.3	4.4
Upper Rio Grande	2/25	29	6.5	2.8	6.6
Wolf Creek Pass	2/26	64	19.5	13.0	22.9
Wolf Cr. Sum. (B)	2/26	68	20.1	17.5	22.1
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	2/26	3	0.6	0.2	3.2
Rio Chama					
Bateman	2/25	28	6.9	6.2	9.4
Capulin Peak	2/27	14	3.8	2.7	4.5
Chama Divide	2/25	4	0.8	0.0	3.6
Chamita	2/25	25	6.1	3.3	7.9
Rio Grande					
Alamitos	2/25	12	3.3	- -	- -
Aspen Grove	2/24	11	2.4	2.8	5.2
Big Tesuque	2/25	8	1.8	1.0	4.6
Blue Bird Mesa	2/26	7	1.3	1.3	4.7
Cordova	3/1	32	6.5	6.5	9.7
Elk Cabin	2/26	5	1.2	1.0	3.3
Fenton Hill	2/27	4	1.3	0.4	3.9
Pajarito Peak	2/28	6	1.8	0.0	1.5
Payrole	2/26	24	4.8	4.0	7.8
Quemazon	2/26	16	3.9	4.5	7.7
Rio En Medio	2/25	18	4.7	5.1	7.9
Sandoval	2/26	5	0.7	1.4	5.0
Taos Canyon	2/23	8	2.2	1.6	4.4
Tres Ritos	2/26	7	1.5	3.6	4.8
Rio Hondo					
Twinning	2/23	17	3.5	6.1	- -
Red River					
Hematite Park (B)	2/22	7	1.0	1.5	3.7
Red River	2/22	15	3.2	3.4	5.2

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/24	29	7.5	3.7	10.2
Lemon	2/25	22	6.0	0.0	- -
Mineral Creek	2/24	50	13.4	11.4	11.7
Molas Lake	2/24	40	10.8	8.2	11.0
Purgatory	2/24	50	12.7	12.3	- -
Red Mt. Pass (B)	2/24	84	27.2	24.1	23.5
Silverton Sub-Sta.	2/24	21	5.6	2.6	5.6
Spud Mountain	2/24	56	16.5	12.3	19.5
Dolores River					
Lizzard Head	2/25	50	13.1	12.0	12.6
Lone Cone	2/24	52	14.6	11.2	- -
Rico	2/25	18	5.3	4.1	6.8
Telluride	2/25	31	8.3	8.2	5.9
Trout Lake	2/25	45	13.0	10.9	10.7
San Juan River					
Chama Divide (B)	2/25	4	0.8	0.0	3.6
Chamita (B)	2/25	25	6.1	3.3	7.9
Upper San Juan	2/26	67	20.7	12.9	25.2
Wolf Cr. Pass (B)	2/26	64	19.5	13.0	22.9
Wolf C. Summit	2/26	68	20.1	17.5	22.1
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/26	62	19.0	16.9	17.0
Blue Mesa	2/25	23	5.5	7.6	3.5
Butte	2/25	45	11.5	13.3	- -
Cochetopa Pass(B)	2/25	24	5.0	8.4	4.5
Crested Butte	2/23	37	8.4	11.1	10.6
Keystone	2/23	61	16.8	17.9	16.3
Lake City	2/26	30	5.8	7.6	7.6
Mesa Lakes (B)	2/25	49	13.1	12.7	13.4
McClure Pass	2/24	45	13.1	13.0	14.6
Park Cone	2/24	36	7.5	12.3	8.8
Park Reservoir	2/25	67	20.6	15.2	19.6
Porphyry Creek	2/25	49	13.5	15.4	13.9
Tomichi	2/26	40	11.3	11.7	10.2
Surface Creek					
Alexander Lake	2/26	62	19.0	16.9	17.0
Mesa Lakes (B)	2/25	49	13.1	12.7	13.4
Park Reservoir	2/25	67	20.6	15.2	19.6
Uncompahgre River					
Ironton Park	2/25	43	13.0	13.1	10.4
Red Mountain Pass	2/24	84	27.2	24.1	23.5
Telluride (B)	2/25	31	8.3	8.2	5.9
COLORADO BASIN					
Blue River					
Blue River	2/25	32	7.0	10.9	7.3
Fremont Pass	2/26	56	14.9	17.0	12.4
Frisco	2/25	27	6.4	10.4	6.3
Grizzly Peak	2/25	64	19.1	23.2	13.4
Hoosier Pass (B)	2/25	41	9.6	13.9	10.5
Shrine Pass	2/25	60	17.3	21.4	13.6
Snake River	2/25	36	9.0	10.9	6.7
Summit Ranch	2/25	29	7.3	7.7	6.0
Colorado River					
Arrow	2/26	51	15.4	15.3	9.3
Berthoud Pass	2/25	56	17.8	16.1	11.6
Berthoud Summit	2/25	65	20.0	19.0	14.8
Cooper Hill	3/1	46	9.3	12.8	8.5
Fiddler Gulch	NS			- -	13.5
Glenmar Ranch	2/24	35	9.5	8.4	6.4
Gore Pass	2/25	43	12.0	10.5	8.4
Grand Lake	2/23	34	8.5	8.2	6.6
Lake Irene	2/23	73	22.1	22.3	18.2
Lapland	2/24	44	12.7	12.1	8.6
Lulu	2/25	68	20.4	22.0	13.2
Lynx Pass	2/25	50	14.6	12.2	10.0
McKenzie Gulch	2/26	26	5.7	4.9	4.8
Middle Fork	2/24	38	10.9	10.0	7.5
Milner	2/23	50	14.3	15.0	11.1
North Inlet	2/24	34	9.2	9.1	7.4
Pando	2/25	35	9.5	12.4	7.9
Phantom Valley	2/23	41	11.5	12.1	8.5
Ranch Creek	2/26	45	12.3	11.5	7.1
Tennessee Pass(B)	2/23	35	7.4	10.3	8.5
Vail Pass	2/25	57	17.7	20.6	14.0
Vasquez	2/24	50	14.6	13.9	9.5
Roaring Fork River					
Aspen	2/26	61	19.8	13.8	13.0
Chapman	2/24	52	14.8	15.9	- -
Independence Pass	2/25	55	15.9	15.4	13.9
Ivanhoe	2/25	60	18.6	19.5	13.8
Kiln	2/25	43	10.8	11.8	- -
Last Chance	2/25	37	10.8	9.8	- -
Lift	2/26	56	15.3	15.2	13.8
McClure Pass	2/24	45	13.1	13.0	14.6
Nast	2/25	27	6.7	6.5	5.2
North Lost Trail	2/24	45	13.1	12.1	13.0
Williams Fork River					
Glenmar Ranch	2/24	35	9.5	8.4	6.4
Jones Pass	2/25	59	18.5	17.3	10.9
Middle Fork	2/24	38	10.9	10.0	7.5
Willow Creek					
Granby	2/24	28	7.6	8.9	6.1
Willow Cr. Pass	2/24	45	13.8	12.1	9.8
Plateau Creek					
Mesa Lakes	2/25	49	13.1	12.7	13.4
Park Reservoir	2/25	67	20.6	15.2	19.6
Trickle Divide	2/25	69	22.4	16.7	21.1
YAMPA BASIN					
Elk River					
Clark	2/25	36	9.1	8.9	11.5
Elk River	2/25	60	18.5	16.2	15.5
Hahn's Peak	2/25	50	14.1	12.2	- -
White River					
Burro Mountain	2/25	56	17.9	15.3	15.2
Rio Blanco	2/26	53	15.6	14.9	12.9
Yampa River					
Bear River				- -	- -
Columbine Lodge(B)	2/25	77	25.3	23.5	19.6
Dry Lake	2/24	64	18.8	18.8	17.6
Lynx Pass (B)	2/25	50	14.6	12.2	10.0
Rabbit Ears	2/25	88	28.6	27.0	21.2
Yampa View	2/25	53	16.7	15.5	12.3

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/6/70	11.1	6.2	7.4	6.4
Willow Pass	11/3/70	9.5	8.1	6.4	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/29/70	6.9	4.8	3.4	3.7
Big Thompson River					
Beaver Dam	10/29/70	7.1	5.1	5.5	3.8
Guard Station	10/29/70	6.9	4.1	3.4	3.4
Two Mile	10/29/70	9.1	5.2	6.9	5.5
Clear Creek					
Clear Creek	11/6/70	9.5	8.1	7.7	7.1
Hoop Creek	11/6/70	4.9	3.4	3.3	2.9
Cache La Poudre River					
Feather	10/30/70	10.1	4.5	8.3	4.5
Laramie Road	10/30/70	12.4	7.7	9.9	7.8
South Platte River					
Hoosier Pass	11/12/70	7.8	5.6	4.8	4.9
Kenosha Pass	11/14/70	4.4	2.6	2.7	2.6
ARKANSAS BASIN					
Arkansas Basin					
Garfield	10/27/70	6.7	4.4	4.4	3.9
Leadville	10/28/70	7.8	3.3	4.8	4.2
Twin Lakes Tunnel	10/28/70	4.5	1.7	1.6	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/20/70	10.7	4.9	7.1	5.5
Rio Grande					
Alberta Park	11/19/70	8.2	5.7	4.8	5.0
Bristol View	11/19/70	6.1	5.0	5.9	3.9
LaVeta	11/20/70	11.9	9.4	8.2	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	2/26/71	6.7	1.9	1.3	3.2
Chamita	2/25/71	8.0	2.8	4.0	4.1
Rio Grande					
Aqua Piedra	2/23/71	7.2	3.5	4.4	3.7
Big Tesuque	2/25/71	3.7	2.0	0.9	1.9
Fenton Hill	10/19/70	6.5	2.7	5.7	3.8
Rio En Medio	2/25/71	3.5	1.8	0.4	1.2
Taos Canyon	2/23/71	3.3	2.2	1.6	2.3
Red River					
Red River Summit	2/22/71	4.8	1.5	1.6	1.9
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/10/70	9.1	5.5	5.9	6.3
Mineral Creek	11/10/70	5.7	3.5	2.6	3.7
Molas Lake	11/10/70	9.4	6.6	4.5	4.6
Dolores River					
Dolores	11/13/70	19.6	8.0	8.2	6.7
Lizzard Head	11/13/70	11.8	4.6	4.4	8.3
Rico	11/13/70	13.8	10.9	10.4	9.9

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
Gunnison River					
King	10/27/70	3.3	2.3	2.2	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/12/70	4.2	3.4	3.1	2.8
Colorado River					
Berthoud Pass	11/6/70	3.9	3.1	3.2	2.8
Gore	11/5/70	4.9	3.0	3.3	2.5
Grand Mesa	10/9/70	12.5	11.1	9.3	9.3
Ranch Creek	11/13/70	8.7	5.7	5.7	6.0
Vail	11/6/70	12.3	7.0	9.5	6.9
Roaring Fork River					
Placita	11/20/70	9.3	7.0	6.5	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/6/70	19.0	12.7	6.1	11.8

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
COLORADO STATE UNIVERSITY
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
APR. 1, 1971

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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In Cooperation with

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C S U
EXPERIMENT STATION

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosco Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Moncos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

April 1, 1971

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

April 1, 1971

WATER SUPPLIES WILL VARY GREATLY OVER COLORADO AND NEW MEXICO THIS SUMMER. NORTHERN COLORADO SHOULD HAVE EXCELLENT WATER SUPPLIES. FORECASTS ARE 100 TO 130% OF NORMAL. THE MIDDLE AREAS OF COLORADO, THE ARKANSAS, THE COLORADO AND THE GUNNISON RIVERS SHOULD HAVE NEAR NORMAL WATER. THE SOUTHERN PORTION OF COLORADO AND NORTHERN AND CENTRAL NEW MEXICO HAVE VERY POOR WATER PROSPECTS. COLORADO HAS GOOD TO FAIR CARRY-OVER STORAGE. SOILS IN THE IRRIGATED AREAS OF NEW MEXICO ARE REPORTEDLY IN POOR CONDITION. COLORADO REPORTS GOOD CONDITIONS.

COLORADO -- THE SNOW PACK IN NORTHERN COLORADO IS EXCELLENT. SOME SNOW COURSES ARE THE MAXIMUM OF RECORD. BOTH THE EAST AND WEST SLOPES OF NORTHERN COLORADO SHOULD ENJOY ONE OF THE BEST WATER YEARS ON RECORD. THE COLORADO RIVER SHOULD SUPPLY ADEQUATE WATER TO ALL ITS USERS. GENERALLY THE ARKANSAS AND GUNNISON RIVERS SHOULD PRODUCE NEAR NORMAL WATER SUPPLIES. THE SOUTHERN PORTION OF THE STATE, THE RIO GRANDE AND THE SAN JUAN BASINS, CAN PLAN ON A DRY SUMMER. UNLESS SUMMER RAINS ARE PLENTIFUL, WATER SHORTAGES WILL OCCUR. CARRY-OVER STORAGE IS GOOD ESPECIALLY IN THE SOUTH PLATTE BASIN.

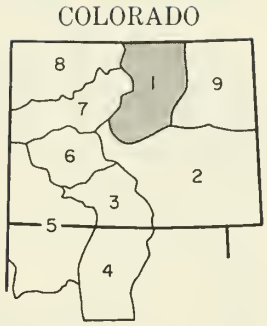
NEW MEXICO -- WATER SUPPLIES THIS SUMMER COULD BE AMONG THE LOWEST ON RECORD. PRACTICALLY NO SNOW IS LEFT IN NEW MEXICO. NEW MEXICO STREAMS ORIGINATING IN COLORADO WILL HAVE A POOR START. ALL FORECASTS ARE WELL BELOW NORMAL. RESERVOIR CARRY-OVER STORAGE IS NEAR NORMAL. UNITS WITH DIRECT FLOW RIGHTS ON NEW MEXICO'S MAJOR STREAMS, AND NO STORAGE WILL HAVE A PARTICULARLY POOR YEAR. THE FLOW PEAKS WILL BE LOW AND LAST ONLY A SHORT PERIOD. LATER SUMMER FLOW WILL BE REDUCED UNLESS SUMMER RAINS ARE BOUNTIFUL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

WATER USERS ON THE UPPER SOUTH PLATTE AND ALL THE NORTHERN TRIBUTARIES SHOULD HAVE ONE OF THE BEST WATER YEARS ON RECORD. ALL STREAMFLOWS ARE BEING FORECASTED ABOVE NORMAL. CARRY-OVER STORAGE IN THE AREA'S MANY RESERVOIRS IS 136% OF THE 15 YEAR AVERAGE. THIS WILL PROVIDE AN EXCELLENT SUPPLEMENTAL SUPPLY. IRRIGATION AUTHORITIES INDICATE VALLEY SOILS ARE IN EXCELLENT CONDITION.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	112	112	100
Boulder at Orodell	60	122	49
Cache La Poudre at Canon Mouth (2)	250	116	215
Clear Creek at Golden (3)	145	122	119
St. Vrain at Lyons (4)	78	111	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Exc.
Coal Creek	Exc.	Exc.
North Fork of South Platte	Exc.	Exc.
North Fork of Cache La Poudre	Exc.	Exc.
Ralston Creek	Exc.	Exc.
Rock Creek	Exc.	Exc.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	89	120
Boulder	3	75	101
Cache La Poudre	8	90	128
Clear Creek	6	79	110
Saint Vrain	3	74	104
South Platte	3	65	96

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	89	139
Boulder	1	102	121
Cache La Poudre	2	91	122
Clear Creek	2	92	130
Saint Vrain	2	95	122
South Platte	2	107	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	26.2	27.4	21.1
Black Hollow	8.0	4.4	4.0	3.3
Boyd Lake	44.0	44.8	31.2	27.6
Cache La Poudre	9.5	8.0	8.4	7.5
Carter Lake	108.9	106.4	100.7	81.7
Chambers Lake	8.8	4.5	3.2	3.0
Cheesman	79.0	73.5	79.1	49.0
Cobb Lake	34.3	21.9	18.5	9.9
Eleven Mile	97.8	96.4	96.4	72.1
Fossil Creek	11.6	9.5	10.0	7.0
Gross	43.1	36.7	35.3	22.4
Halligan	6.4	3.3	3.8	4.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Horsetooth	143.5	116.5	108.4	106.8
Lake Loveland	14.3	10.9	11.9	8.4
Lone Tree	9.2	8.7	8.0	6.6
Mariano	5.4	5.4	5.1	4.2
Marshall	10.3	7.0	7.5	3.0
Marston	18.0	16.3	16.4	14.7
Milton	24.4	15.9	13.5	10.8
Standley	42.0	31.0	32.6	11.0
Terry Lake	8.2	6.4	.2	5.0
Union	12.7	12.7	12.7	7.6
Windsor	18.6	8.7	13.7	9.9

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

WATER USERS ON THE ARKANSAS DRAINAGE SHOULD HAVE NEAR NORMAL WATER SUPPLIES THIS SUMMER. THE SNOW PACK IS NEAR NORMAL ON THE ARKANSAS DRAINAGE. THE SOUTHERN TRIBUTARIES HAVE CONSIDERABLY LESS SNOW, BUT WILL SUPPLY SOME WATER. CARRY-OVER STORAGE IS EXCELLENT. WITH THE EXCEPTION OF JOHN MARTIN, MOST OF THE LARGER RESERVOIRS, CONTAIN CONSIDERABLY MORE WATER THAN NORMAL. VALLEY SOILS CONTAIN FAIR TO GOOD SOIL MOISTURE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	290	97	298
Arkansas at Salida (1)	300	97	309
Cucharas nr LaVeta	9	75	12
Purgatoire at Trinidad	40	87	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable Creek	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	78	103
Cucharas and Purgatoire	3	33	39

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	107	99
Cucharas and Purgatoire	1	106	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	47.5	17.6	11.1
Clear Creek	11.4	6.0	10.4	7.3
Cucharas	40.0		1.7	3.3
Great Plains	150.0	108.6	73.2	38.3
Horse Creek	26.9	9.8	20.1	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	34.6	50.8	89.4
Meredith	41.9	25.6	24.7	10.0
Model	15.0	1.3	1.1	3.1
Turquoise	130.0	52.4	42.7	7.5
Twin Lakes	57.9	41.5	36.8	19.9

+ 1953-1967 period

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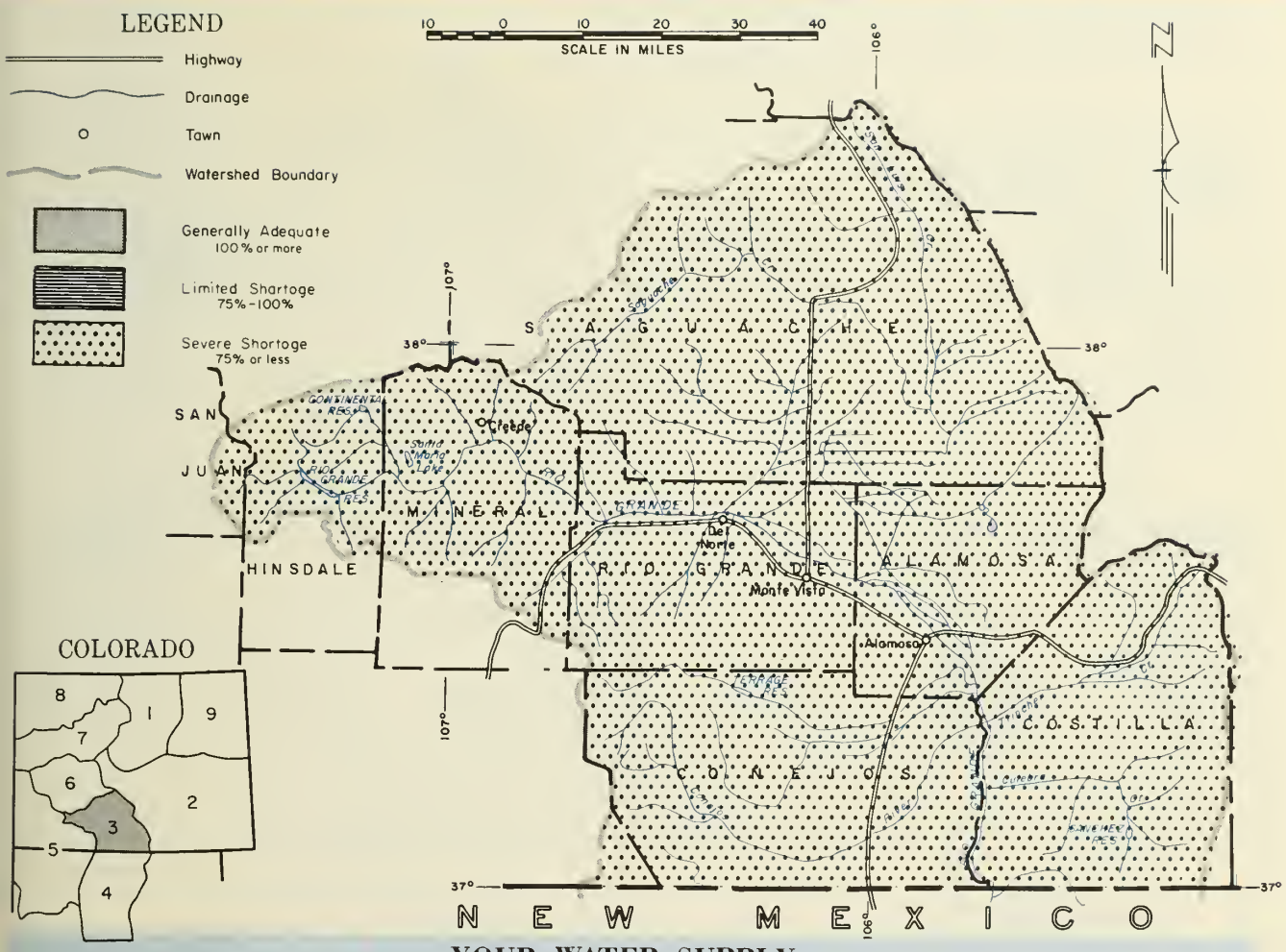
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY FORECASTS ARE MUCH BELOW NORMAL ON ALL THE RIO GRANDE BASIN. CURRENT SNOW PACK RANGES FROM 46% ON CULEBRA, 51% ON CONEJOS TO 63% ON THE RIO GRANDE AND 72% FOR THE ALAMOSA. MANY SNOW COURSES ARE NEAR THE MINIMUM ON RECORD. RESERVOIR STORAGE IS 179% OF AVERAGE. A COMBINED TOTAL OF SIX RESERVOIRS IS 83,500 ACRE FEET COMPARED TO AN AVERAGE OF 46,700 ACRE FEET. SOIL MOISTURE IN THE MOUNTAIN AREAS IS ABOVE AVERAGE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	40	65	62
Conejos nr Mogote (1)	120	66	182
Culebra at San Luis (2)	15	79	19
Rio Gr. at 30 Mile Bridge (3)	90	77	117
Rio Gr. nr Del Norte (3)	290	66	438
South Fork at South Fork	75	68	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera	Poor	Poor

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	85	72
Conejos	3	68	51
Culebra	2	46	46
Rio Grande	10	76	63

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	143	147
Conejos	1	78	77
Culebra	2	116	96
Rio Grande	3	125	123

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	10.0	6.6	5.1
Platoro	60.0	2.9	3.0	7.1
Rio Grande	45.8	41.6	28.0	13.3

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	18.0	18.7	11.1
Santa Maria	45.0	11.0	6.7	6.0
Terrace	17.7	0.0	9.9	4.0

+ 1953-1967 period.

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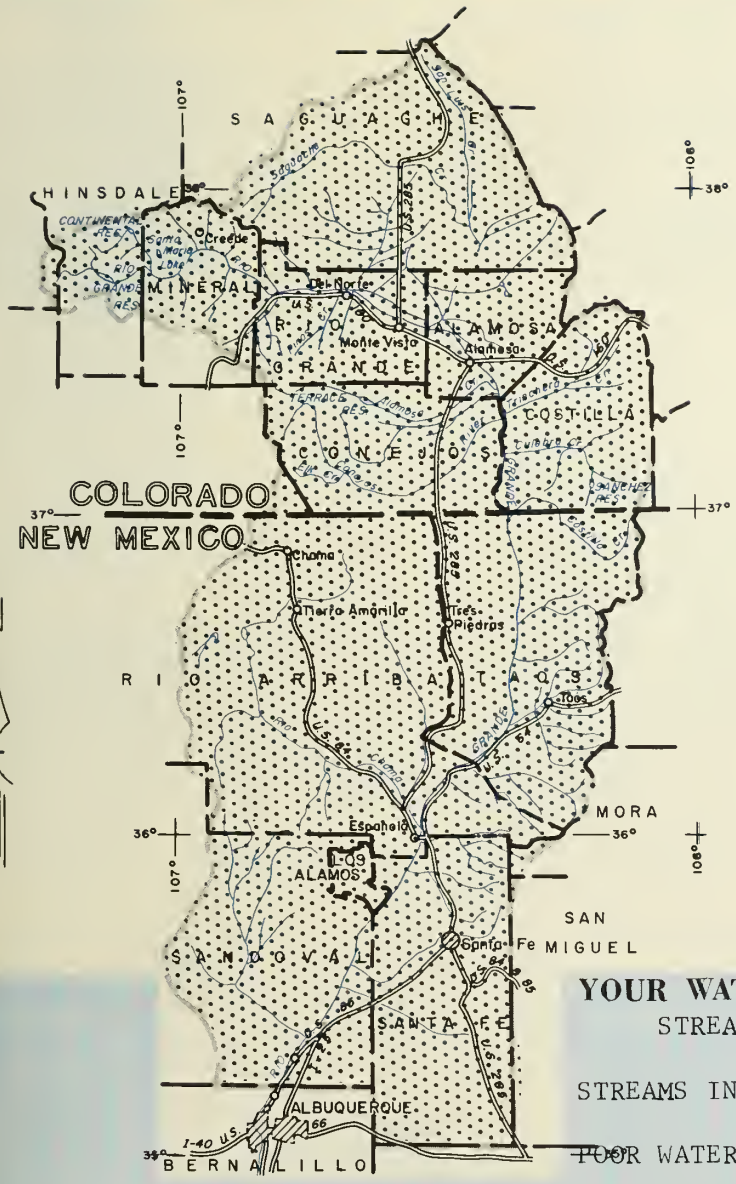
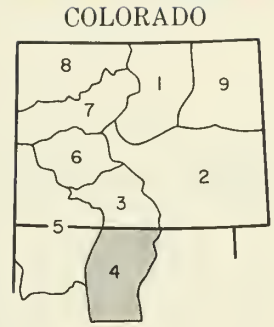
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

STREAMFLOW FORECASTS OF THE MAJOR STREAMS IN NEW MEXICO INDICATE A VERY POOR WATER YEAR IS IN PROSPECT THIS SUMMER. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR. MOST OF THE SNOW SEASON IS PAST AND THE CURRENT SNOW PACK IS ALMOST NON EXISTENT. ONLY VERY HIGH ELEVATIONS HAVE ANY SNOW LEFT.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	9	50	18
Pecos at Pecos	20	49	41
Rio Chama to ElVado	110	59	188
Rio Gr. at Otowi (2)	280	55	513
Rio Gr. at San Mar (2)	140	42	334
Rio Hondo nr Valdez	7	47	15
Red R. at mouth nr Questa	20	63	32

The farecost of the Rio Grande ot San Marcial is 22 % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus chonge in Costilla Reservoir. (2) Observed flow plus chonge in storage in El Vodo and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	0	0
Rio Chama	4	36	29
Rio Grande, N.M.	13	22	20
Rio Hondo	1	11	--
Red River	2	22	19

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	126	90
Rio Chama	1	---	90
Rio Grande	4	73	82
Red River			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	60	85	64
Caballo	344	43	47	65
Conchas	273	153	223	161
Elephant Butte	2195	317	535	334

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
ElVado	195	1	1	6
McMillen-Avalon	32	15	35	22

+ 1953-1967 period.

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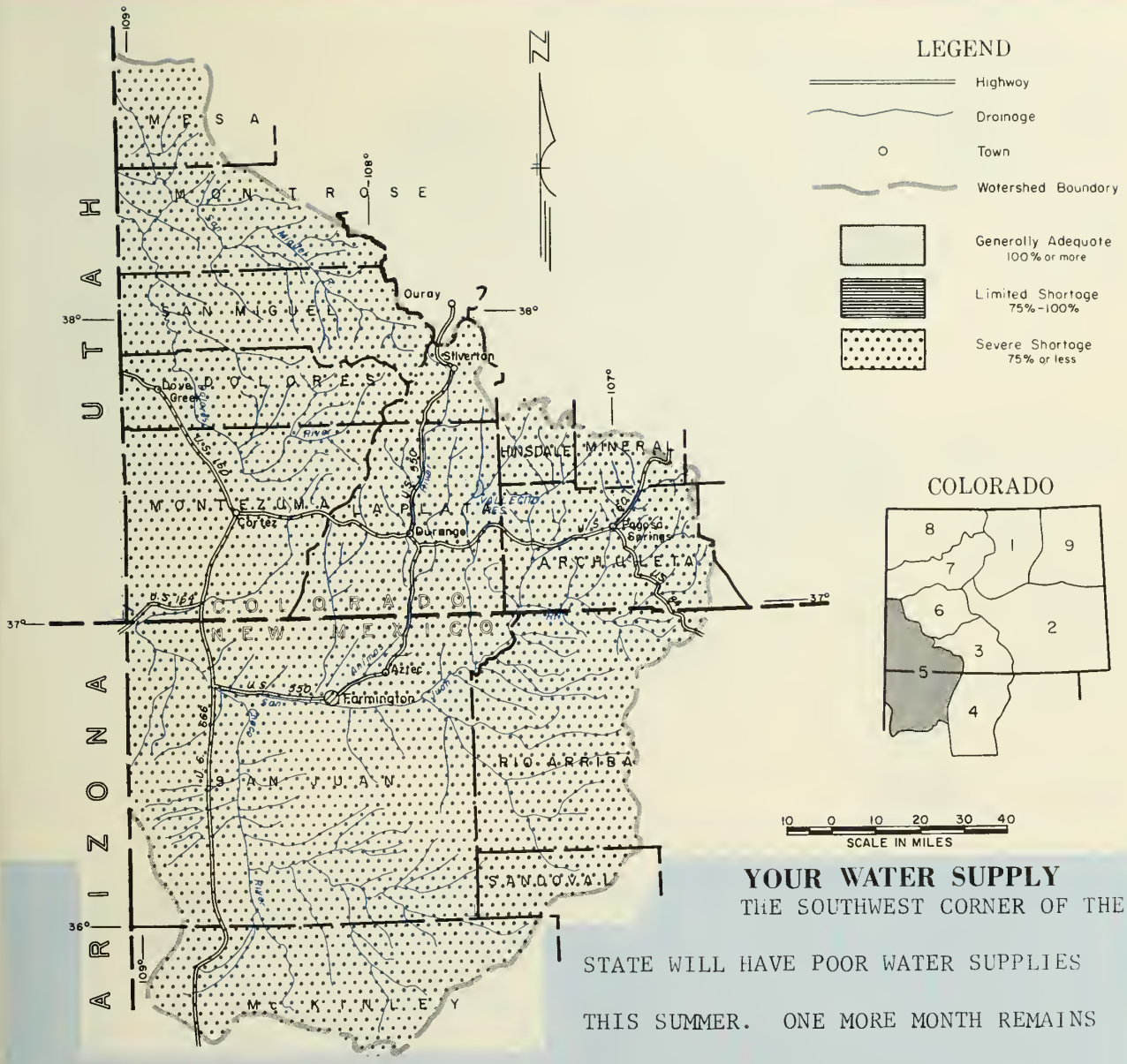
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SOUTHWEST CORNER OF THE STATE WILL HAVE POOR WATER SUPPLIES THIS SUMMER. ONE MORE MONTH REMAINS TO INCREASE THE SNOW PACK, HOWEVER, IT WOULD HAVE TO BE AN EXTREMELY HIGH SNOW MONTH TO EVEN BRING THE SNOW PACK TO NORMAL. CURRENT SNOW PACK RANGES FROM 58% OF NORMAL ON THE SAN JUAN TO 78% ON THE ANIMAS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Animas at Durango	320	78	409
Dolores at Dolores	155	67	231
La Plata at Hesperus	16	67	24
Los Pinos at Bayfield (1)	125	64	194
Piedra Cr. at Piedra	90	55	163
San Juan at Carracas	250	66	379
Inflow to Navajo Res. (1) (Apr-Jul)	370	60	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Fair
Mancos	Avg.	Fair
San Miguel	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Animas	6	82	78
Dolores	4	64	77
San Juan	5	77	58

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Animas	3	130	94
Dolores	3	111	102
San Juan	2	157	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Goundhog	22	14	13	7
Lemon	40	26	30	15
Navajo	1696	834	859	--
Vallecito	126	81	79	50

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1953-1967 period.

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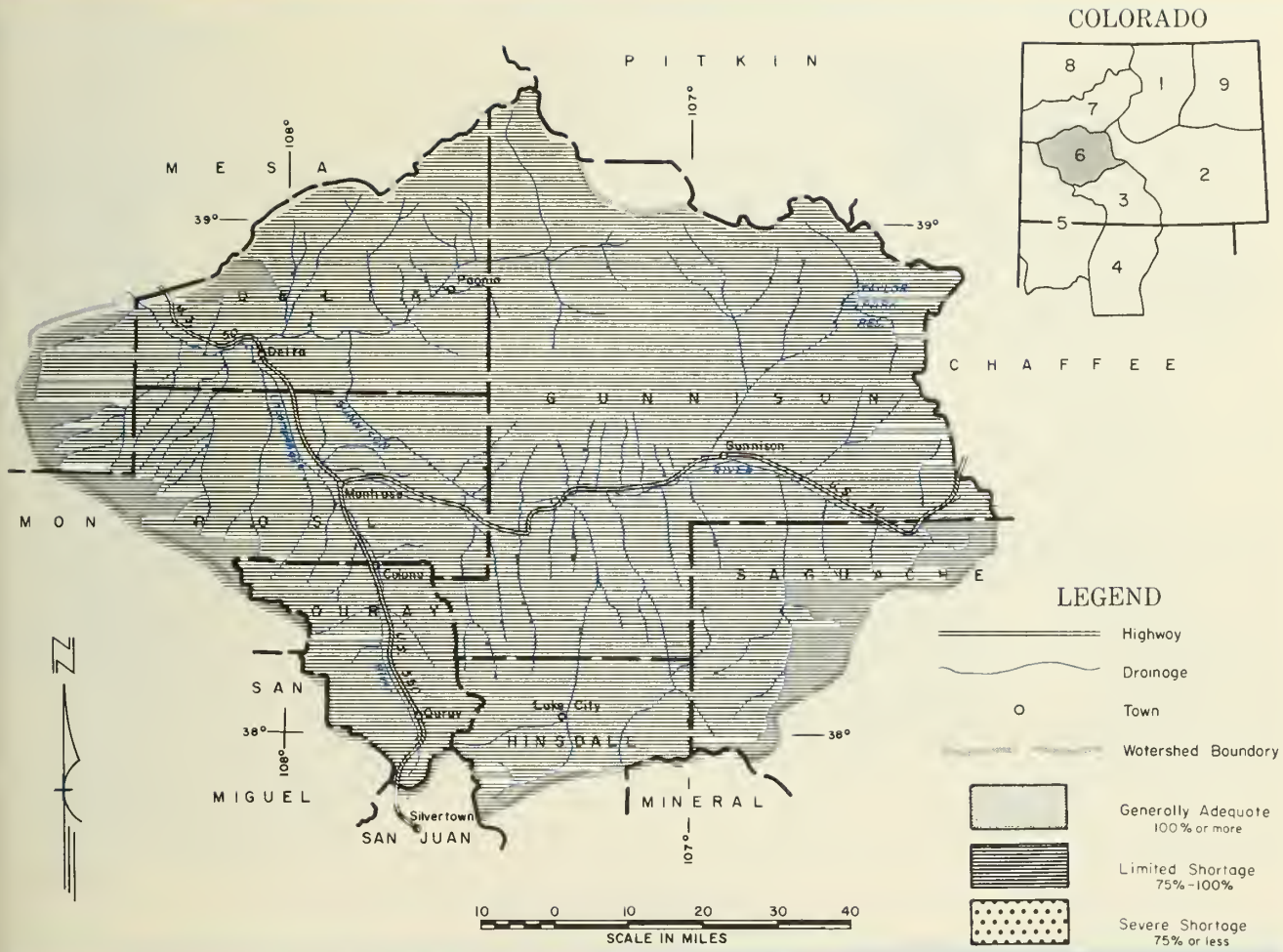
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS FOR THE GUNNISON RIVER AND ITS TRIBUTARIES ARE SLIGHTLY BELOW THE 1953-67 AVERAGE, RANGING FROM 78% FOR THE UNCOMPAHGRE AND 88% FOR THE GUNNISON TO 94% FOR SURFACE CREEK. THESE ARE ABOUT THE SAME AS LAST MONTH. COMBINED USABLE STORAGE ON BLUE MESA, MORROW POINT AND TAYLOR RESERVOIRS IS 516,000 ACRE FEET. TAYLOR PARK IS 92,000 ACRE FEET OR 159% OF AVERAGE.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison Inflow to Blue Mesa	650	85	767
Gunnison nr Grand Junction	1000	88	1137
Surface Cr. nr Cedaridge	15	94	16
Uncompahgre at Colona	100	78	129

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Exc.
Taylor	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	86	96
Surface Creek	3	99	100
Uncompahgre	3	80	86

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	74	90
Surface Creek	1	130	139
Uncompahgre	1	130	139

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	830	309	413	--
Morrow Point	121	115	114	--
Taylor	106	92	90	58

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953–1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE COLORADO RIVER AND ITS TRIBUTARIES ABOVE GLENWOOD SPRINGS SHOULD ALL PROVIDE ADEQUATE WATER SUPPLIES THIS SUMMER. THE SNOW PACK VARIES FROM 103% OF AVERAGE ON PLATEAU CREEK TO 137% ON THE WILLIAMS FORK. FORECASTS FALL IN ABOUT THE SAME RANGE. SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN GOOD CONDITION. CARRY-OVER STORAGE IN THE COLORADO BASIN RESERVOIRS IS EXCELLENT. SOIL MOISTURE CONDITIONS IN THE MOUNTAINS ARE GOOD.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue ab Green Mt. (1)	275	117	236
Colo. Rv. inflow to Granby Res. (2)	275	126	219
Colo. Rv. nr Dotsero (3)	1600	116	1375
Roaring Fork at Glenwood Springs (4)	730	105	692
Wm. Fk nr Par. (5)	85	142	60
Will. Cr. inflow to Will. Cr. Res.	60	130	46
Colo. nr Cameo (6)	2480	112	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Exc.
Eagle River	Exc.	Exc.
Gypsum Creek	Exc.	Exc.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus chang in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	88	122
Colorado	21	99	131
Plateau	3	106	103
Roaring Fork	7	103	121
Williams Fork	2	106	137
Willow	2	88	116

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	103	129
Colorado	5	116	137
Roaring Fork	1	101	129
Willow	1	109	148

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	246	239	167
Granby	466	351	240	233
Green Mountain	147	55	50	63
Homestake	43	--	--	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	61	69	--
Williams Fork	97	45	42	27
Willow Creek	9	8	8	6
Vega	32	18	15	11

+ 1953-1967 period.

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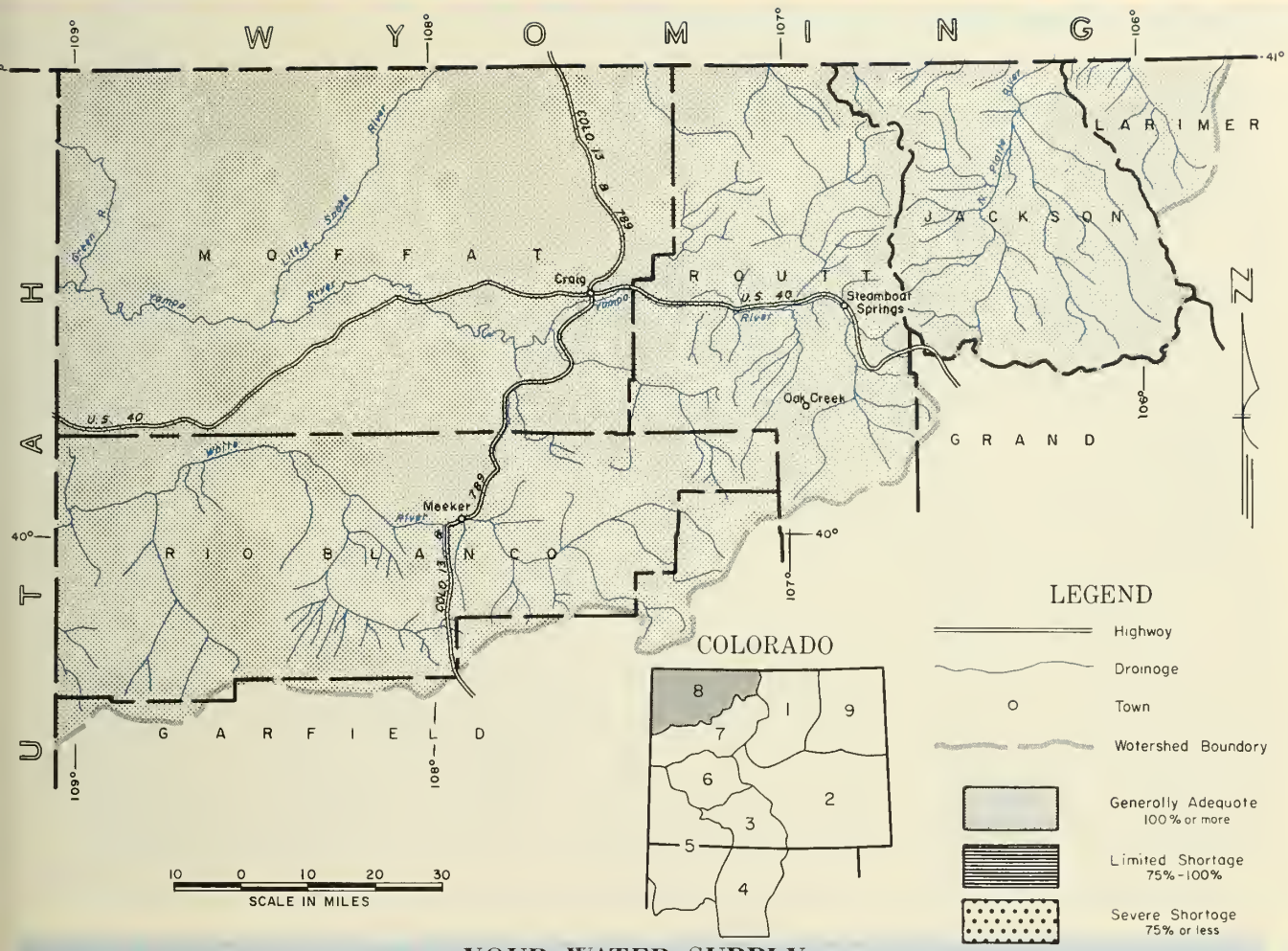
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES SHOULD FAR EXCEED DEMANDS IN NORTHWESTERN COLORADO. ALL STREAMS IN THIS AREA WILL FLOW MUCH ABOVE NORMAL. THE DEEPEST SNOW EVER MEASURED ON A REGULAR SNOW COURSE WAS RECORDED THIS YEAR. IT WAS 176 INCHES ON ROUND MOUNTAIN SNOW COURSE. MOUNTAIN SOILS ARE CONSIDERABLY WETTER THAN NORMAL. VALLEY SOILS ARE IN GOOD CONDITION. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	235	133	191
Laramie at Jelm	158	152	104
Little Snake at Lily	425	153	277
No. Platte at Northgate	375	174	225
White nr Meeker	355	121	293
Yampa nr Maybell	1130	132	853
Yampa at Steamboat Springs	340	131	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	3	104	119
Laramie	3	99	131
North Platte	5	108	136
White	2	110	122
Yampa	6	107	130

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	91	122
North Platte	2	135	131
Yampa	1	100	166

+ 1953-1967 period.

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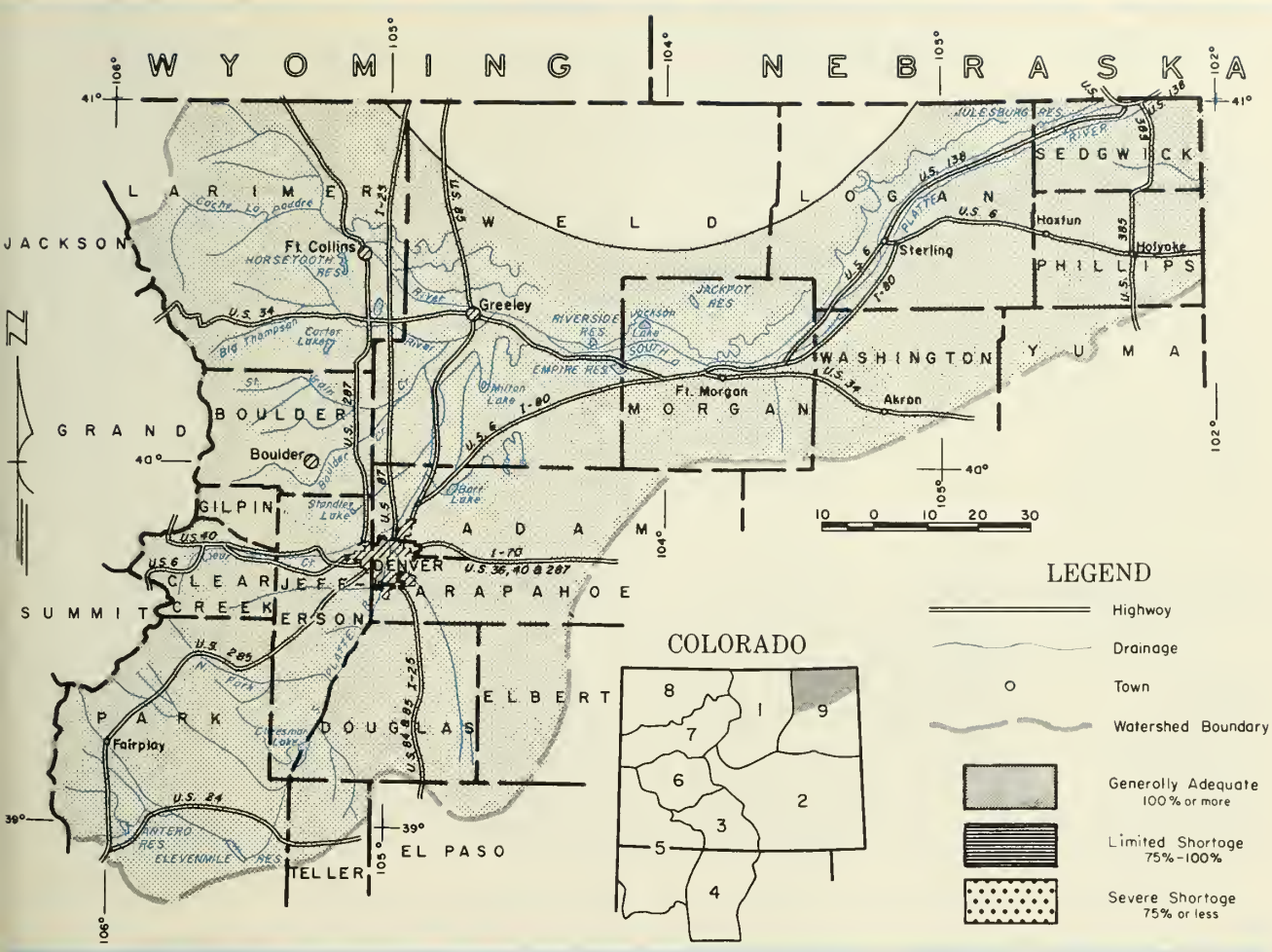
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE EXCELLENT ON THE LOWER SOUTH PLATTE THIS SUMMER. THE SNOW PACK IN THE UPPER SOUTH PLATTE AND ALL ITS TRIBUTARIES IS MUCH ABOVE NORMAL. STREAMFLOWS ARE ALL FORECASTED TO FLOW ABOVE NORMAL. CARRY-OVER STORAGE IS NEARLY UP TO CAPACITY AND 123% OF AVERAGE. SOILS IN THE IRRIGATED AREAS ARE REPORTED TO BE IN GOOD CONDITION. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	112	112	100
Boulder at Orodell	60	122	49
Cache La Poudre at Canon Mouth	250	116	215
Clear Cr. at Golden (2)	145	122	119
Saint Vrain at Lyons (3)	78	111	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Exc.
South Platte from Fort Morgan to Sterling	Exc.	Exc.
South Platte below Sterling	Exc.	Exc.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	89	120
Boulder	3	75	101
Cache La Poudre	8	90	128
Clear Creek	6	79	110
Saint Vrain	3	74	104
South Platte	3	65	96

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	89	139
Boulder	1	102	121
Cache La Poudre	2	91	122
Clear Creek	2	92	130
Saint Vrain	2	95	122
South Platte	2	107	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	106.4	100.7	81.7
Cheesman	79.0	73.5	79.1	49.0
Eleven Mile	97.8	96.4	96.4	72.1
Empire	37.7	32.8	34.8	29.6
Horsetooth	143.5	116.5	108.4	106.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	33.2	32.7	34.0
Julesburg	28.2	19.8	23.2	21.5
Prewitt	32.8	27.7	28.6	16.8
Point of Rocks	70.0	69.2	70.6	58.4
Riverside	57.5	61.9	60.5	49.6

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/31	63	20.7	22.5	16.3
McIntyre	3/26	49	13.4	15.3	10.5
Roach	3/27	74	24.8	21.5	18.2
North Platte River					
Cameron Pass	3/31	88	38.6	33.1	26.5
Columbine Lodge	3/30	80	31.2	27.8	23.5
Norghgate	3/31	26	7.9	8.5	6.2
Park View	3/29	40	11.8	11.8	8.6
Willow Cr. Pass(B)	3/29	47	15.4	15.9	12.5
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/30	21	7.1	12.2	5.9
Boulder Falls	3/29	43	14.2	18.4	13.3
University Camp	3/29	56	19.1	22.7	20.7
Big Thompson River					
Deer Ridge	3/26	16	4.7	9.4	5.0
Hidden Valley	3/29	39	10.6	13.4	11.0
Lake Irene (B)	3/27	79	27.3	27.4	20.7
Long's Peak	3/27	43	13.2	14.3	10.7
Two Mile	3/26	63	18.7	19.6	14.5
Cache La Poudre					
Bennett Creek	3/31	32	8.9	12.3	- -
BigSouth	3/28	2	0.5	2.7	2.4
Cameron Pass	3/31	88	38.6	33.1	26.5
Chambers Lake	3/28	33	12.1	14.4	9.1
Deadman Hill	3/31	63	20.7	22.5	16.3
Hour Glass Lake	3/31	27	7.7	11.6	6.8
Joe Wright	3/31	78	29.3	30.1	- -
Lost Lake	3/28	46	16.0	16.9	11.5
Pine Creek	3/30	2	0.7	3.7	1.9
Red Feather	3/30	31	7.9	10.9	7.2
Clear Creek					
Baltimore (B)	3/30	21	7.1	12.2	5.9
Berthoud Falls	3/30	54	16.3	20.4	12.9
Empire	3/30	26	8.5	11.9	7.5
Grizzly Peak (B)	3/30	70	23.9	25.7	17.9
Loveland Lift	3/31	53	16.5	24.5	23.4
Loveland Pass	3/31	54	19.0	20.7	15.4
Saint Vrain River					
Copeland Lake	4/1	11	5.5	7.5	4.4
Ward	3/29	24	6.6	9.6	6.7
Wild Basin	4/1	41	11.7	15.0	11.8
South Platte River					
Como	3/30	20	6.5	11.0	- -
Geneva Park	3/29	10	2.7	7.8	3.5
Horseshoe Mt.	3/26	42	11.5	12.5	- -
Hoosier Pass	3/29	45	11.6	18.0	12.9
Jefferson Creek	3/30	31	10.3	12.3	9.2
Mosquito	3/29	31	8.7	13.8	- -
Trout Creek Pass	3/26	7	2.2	6.1	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/29	26	7.3	10.5	5.8
Cooper Hill (B)	3/31	49	12.2	14.6	10.6
East Fork	3/30	35	10.3	13.3	9.6
Four Mile Park	3/29	14	4.7	8.7	4.4
Fremont Pass	3/30	59	19.4	19.9	16.1
Garfield	3/29	36	12.4	14.4	13.2
Hermit Lake	3/29	15	5.4		- -
Monarch Pass	3/29	47	16.3	20.1	17.3
Tennessee Pass	3/29	37	10.0	13.9	10.1
Twin Lakes Tunnel	3/29	39	10.3	11.0	10.7
Westcliffe	3/29	10	3.3	9.8	5.4

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG 53 67
Cucharas River					
Blue Lakes	3/30	0	0.0	4.2	2.9
Cucharas Pass	3/30	9	3.9	9.0	- -
LaVeta Pass (B)	3/30	7	2.4	7.2	7.3
Purgatorie River					
Bourbon	3/30	12	3.4	9.0	7.1
RIO GRANDE BASIN-Colo.					
Alamosa River					
Silver Lakes	3/31	0	0.0	3.8	5.5
Summitville	3/26	55	17.0	16.3	18.1
Conejos River					
Cumbres	3/30	28	10.3	13.4	18.6
Platoro	3/31	30	8.5	13.6	16.6
River Springs	3/29	6	1.6	3.1	4.8
Culebra River					
Brown Cabin	4/1	0	0.0		- -
Cottonwood (B)	4/1	18	4.8		- -
Culebra	3/30	14	4.8		8.4
LaVeta Pass (B)	3/30	7	2.4		7.3
Trinchera (B)					- -
Rio Grande					
Cochetopa Pass	3/25	26	6.0	9.6	5.1
Grayback	3/29	30	11.4	14.0	- -
Hiway	3/30	51	17.9	20.0	26.0
Lake Humphrey	3/26	10	3.2	5.1	5.5
Love Lake	3/30	11	3.3	8.5	- -
Pass Creek	3/30	11	3.9	5.7	11.1
Pool Table	3/30	7	1.7	4.9	5.9
Porcupine	3/29	26	6.4	9.7	10.1
Santa Maria	3/29	2	0.5	1.8	3.7
Upper Rio Grande	3/29	12	4.2	4.3	6.8
Wolf Creek Pass	3/30	40	15.7	20.5	27.0
Wolf Cr. Sum. (B)	3/30	59	21.6	24.7	28.3
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	3/27	0	0.0	0.0	1.3
Rio Chama					
Bateman	3/27	25	6.4	10.5	11.4
Capulin Peak	3/29	0	0.0	3.8	4.0
Chama Divide	3/30	0	0.0	0.0	1.4
Chamita	3/30	3	0.7	5.4	7.5
Rio Grande					
Aspen Grove	3/29	2	0.5	3.2	3.7
Big Tesuque	3/29	0	0.0	1.3	4.2
Blue Bird Mesa	3/28	0	0.0	4.8	3.6
Cordova	3/26	21	5.1	8.8	10.0
Elk Cabin	3/30	0	0.0	0.8	2.1
Fenton Hill	3/30	0	0.0	3.7	2.7
Pajarito Peak	3/30	0	0.0	0.0	0.3
Payrole	3/30	4	1.2	8.4	6.2
Quemazon	3/29	8	2.8	8.6	8.2
Rio En Medio	3/29	6	2.8	6.6	7.7
Sandoval	3/29	0	0.0	3.9	4.5
Taos Canyon	3/29	0	0.0	2.9	3.5
Tres Ritos	3/25	0	0.0	4.0	4.2
Rio Hondo					
Twinning	3/30	3	1.0	8.9	- -
Red River					
Hematite Park (B)	3/29	0	0.0	3.0	3.5
Red River	3/29	5	1.7	4.8	5.5

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/29	13	4.2	7.3	10.8
Lemon	3/30	3	1.0	4.6	- -
Mineral Creek	3/29	38	12.5	15.8	13.3
Molas Lake	3/29	30	9.7	11.7	12.6
Purgatory	3/29	37	12.0	18.5	- -
Red Mt. Pass (B)	3/29	76	29.1	31.5	30.1
Silverton Sub-Sta.	3/29	6	2.4	5.3	5.1
Spud Mountain	3/29	47	16.4	18.6	23.1
Dolores River					
Lizzard Head	3/30	40	13.2	16.4	16.0
Lone Cone	3/29	38	13.4	16.7	- -
Rico	3/30	0	0.0	7.5	5.4
Telluride	3/30	15	5.6	10.2	5.7
Trout Lake	3/30	35	12.4	14.9	13.2
San Juan River					
Chama Divide (B)	3/30	0	0.0	0.0	1.4
Chamita (B)	3/30	3	0.7	5.4	7.5
Upper San Juan	3/30	43	17.5	21.1	30.8
Wolf Cr. Pass (B)	3/30	40	15.7	20.5	27.0
Wolf Cr. Summit	3/30	59	21.6	24.7	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/31	58	21.3	23.6	21.4
Blue Mesa	3/30	17	5.1	10.6	7.9
Butte	3/29	48	14.7	17.5	- -
Cochetopa Pass (B)	3/25	26	6.0	9.6	5.1
Crested Butte	3/31	35	9.7	13.1	13.3
Keystone	3/31	58	20.4	21.5	19.7
Lake City	3/26	28	7.2	9.4	7.7
Mesa Lakes (B)	3/29	52	17.5	18.0	17.5
McClure Pass	3/29	42	15.3	17.3	14.6
Park Cone	3/30	34	9.1	13.3	10.9
Park Reservoir	3/29	63	23.6	21.5	23.6
Porphyry Creek	3/29	51	16.6	18.8	16.9
Tomichi	3/29	40	12.9	14.5	12.2
Surface Creek					
Alexander Lake	3/31	58	21.3	23.6	21.4
Mesa Lakes (B)	3/29	52	17.5	18.0	17.5
Park Reservoir	3/29	63	23.6	21.5	23.6
Uncompahgre River					
Ironton Park	3/30	36	11.7	16.6	17.9
Red Mountain Pass	3/29	76	29.1	31.5	30.1
Telluride (B)	3/30	15	5.6	10.2	5.7
COLORADO BASIN					
Blue River					
Blue River	3/29	33	8.6	12.5	8.5
Fremont Pass	3/30	59	19.4	19.9	16.1
Frisco	3/30	27	8.8	10.6	7.5
Grizzly Peak	3/30	70	23.9	25.7	17.9
Hoosier Pass (B)	3/29	45	11.6	18.0	12.9
Shrine Pass	3/30	67	23.6	23.7	17.4
Snake River	3/30	36	10.9	12.4	7.6
Summit Ranch	3/30	30	9.3	9.6	7.1
Colorado River					
Arrow	3/30	49	18.7	12.1	11.8
Berthoud Pass	3/29	60	21.6	20.3	14.5
Berthoud Summit	3/30	69	21.4	23.6	19.3
Cooper Hill	3/31	49	12.2	14.6	10.6
Fiddler Gulch	3/29	54	15.0	18.4	15.1
Glenmar Ranch	3/30	37	10.3	9.9	7.9
Gore Pass	3/29	40	12.5	13.3	10.0
Grand Lake	3/28	34	9.3	10.5	8.2
Lake Irene	3/27	79	27.3	27.4	20.7
Lapland	3/25	53	15.9	13.6	9.9
Lulu	3/30	75	25.9	27.4	17.0
Lynx Pass	3/29	50	16.2	15.7	12.0
McKenzie Gulch	3/29	21	5.7	5.7	- -
Middle Fork	3/30	40	13.0	12.0	9.1
Milner	3/27	56	17.4	18.5	13.3
North Inlet	3/28	34	10.3	11.2	8.7
Pando	3/30	36	11.3	12.2	10.4
Phantom Valley	3/27	44	13.9	14.9	10.4
Ranch Creek	3/30	45	14.5	13.7	9.4
Tennessee Pass (B)	3/29	37	10.0	13.9	10.1
Vail Pass	3/30	62	22.5	22.2	17.1
Vasquez	3/26	59	18.3	16.7	12.4
Roaring Fork River					
Aspen	3/29	70	24.9	18.0	16.4
Chapman	3/29	56	18.1	17.4	- -
Independence Pass	3/29	65	20.2	23.2	17.7
Ivanhoe	3/30	65	23.0	23.3	17.9
Kiln	3/30	48	15.2	14.1	- -
Last Chance	3/30	40	13.3	11.8	- -
Lift	3/29	65	20.7	17.5	19.0
McClure Pass	3/29	42	15.3	17.3	14.6
Nast	3/30	25	7.8	8.0	5.3
North Lost Trail	3/29	44	15.2	16.6	14.1
Williams Fork River					
Glenmar Ranch	3/30	37	10.3	9.9	7.9
Jones Pass	3/29	64	22.3	13.6	- -
Middle Fork	3/30	40	13.0	12.0	9.1
Willow Creek					
Granby	3/29	26	7.7	10.4	7.5
Willow Cr. Pass	3/29	47	15.4	15.9	12.5
Plateau Creek					
Mesa Lakes	3/29	52	17.5	18.0	17.5
Park Reservoir	3/29	63	23.6	21.5	23.6
Trickle Divide	3/29	69	27.0	24.6	25.2
YAMPA BASIN					
Elk River					
Clark	3/31	29	9.0	10.6	10.0
Elk River	3/31	62	22.7	20.2	16.8
Hahn's Peak	3/31	47	15.7	14.9	12.9
White River					
Burro Mountain	3/30	60	22.6	20.0	17.0
Rio Blanco	3/29	51	17.5	16.6	15.8
Yampa River					
Bear River	3/26	51	13.4	15.1	11.1
Columbine (B)	3/30	80	31.2	27.8	23.5
Dry Lake	3/30	65	22.4	20.8	19.9
Lynx Pass (B)	3/29	50	16.2	15.7	12.0
Rabbit Ears	3/30	96	35.7	31.8	25.7
Yampa View	3/30	52	19.8	18.1	14.3

NOTE:

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	3/31/71	11.1	7.3	4.8	6.4
Willow Pass	3/29/71	9.5	9.3	8.5	6.3
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	3/29/71	6.9	4.1		3.4
Big Thompson River					
Beaver Dam	3/27/71	7.1	4.1		3.3
Guard Station	3/27/71	6.9	- -	3.2	3.6
Two Mile	3/27/71	4.9	4.7		2.6
Clear Creek					
Clear Creek	3/31/71	9.5	6.6	7.2	5.0
Hoop Creek	3/29/71	4.9	3.3		2.6
Cache La Poudre River					
Feather	3/31/71	10.1	5.3	7.3	4.0
Laramie Road	3/28/71	12.4	7.9	7.2	6.8
South Platte River					
Hoosier Pass	3/29/71	7.8	4.3	4.9	4.3
Kenosha Pass	3/30/71	4.4	2.9	2.3	2.0
ARKANSAS BASIN					
Arkansas River					
Garfield	3/29/71	6.7	4.6	4.1	3.5
Leadville	3/30/71	7.8	3.2	3.1	3.7
Twin Lakes Tunnel	3/30/71	4.5	1.8	1.8	2.5
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	3/25/71	10.7	4.6	5.9	6.0
Rio Grande					
Alberta Park	3/29/71	8.2	6.8	5.1	4.7
Bristol View	3/31/71	6.1	5.1	3.2	3.4
LaVeta Pass	3/25/71	11.9	8.7	8.2	8.7
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	3/27/71	6.7	1.9	2.5	3.2
Chamita	3/30/71	8.0	4.7		4.1
Rio Grande					
Aqua Piedra	3/29/71	7.2	3.9	5.6	3.7
Big Tesuque	3/29/71	3.7	0.9	1.9	1.9
Fenton Hill	NS	6.5			5.1
Rio En Medio	3/29/71	3.5	0.4	1.4	1.2
Taos Canyon	3/29/71	3.3	2.3	2.4	2.3
Red River					
Red Summit	3/29/71	4.9	1.5	0.6	1.9
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	3/29/71	9.1	6.4	3.9	6.9
Mineral Creek	3/29/71	5.7	4.1	2.6	3.5
Molas Lake	3/29/71	9.4	3.4	4.2	4.4
Dolores River					
Dolores	3/30/71	19.6	8.4	7.8	8.0
Lizzard Head	3/30/71	11.8	5.0	3.4	7.1
Rico	3/30/71	13.8	10.5	10.4	8.3

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
GUNNISON BASIN					
Gunnison River					
King	3/29/71	3.3	1.7	2.3	1.9
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	3/29/71	4.2	3.1	3.0	2.4
Colorado River					
Berthoud Pass	3/29/71	3.9	3.1	3.2	2.5
Gore	3/29/71	4.9	3.5	3.3	2.6
Grand Mesa	3/29/71	12.5	12.5	9.6	9.0
Ranch Creek	3/30/71	8.7	5.9	6.1	5.3
Vail	3/30/71	12.3	10.5	8.4	6.5
Roaring Fork River					
Placita	3/31/71	9.3	8.4	8.3	6.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	3/31/71	19.0	19.0	5.9	11.4

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
MAY 1, 1971

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, Plateau Valley, South Side, and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, Upper White River, Lower White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Hoxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

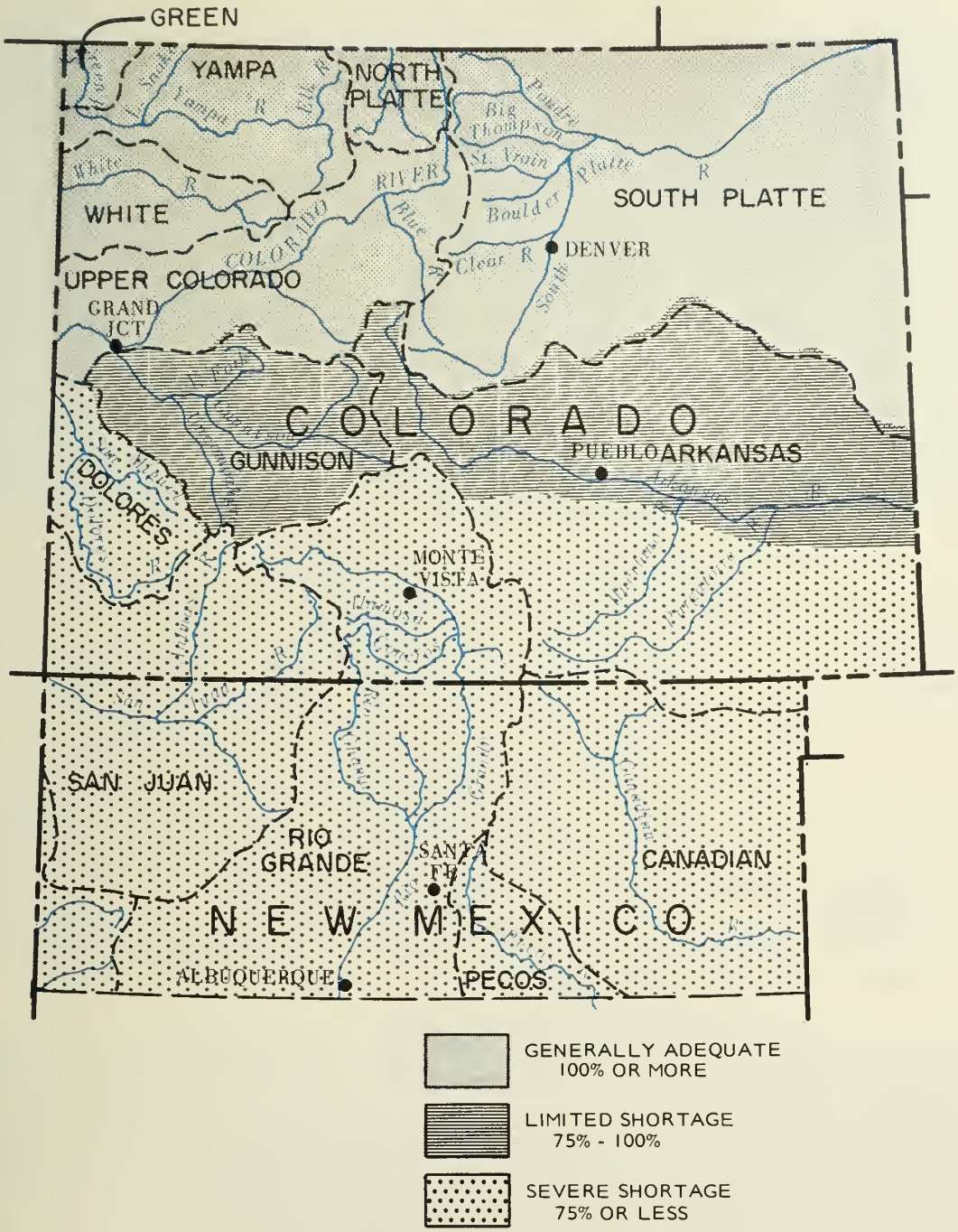
APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

May 1, 1971



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

May 1, 1971

THE SNOW PACK IN COLORADO AND NEW MEXICO RANGE FROM MUCH ABOVE NORMAL IN NORTHERN COLORADO TO A MINIMUM OF RECORD IN SOUTHERN COLORADO AND NORTHERN NEW MEXICO. OTHER CONDITIONS TEND TO FOLLOW THE SAME PATTERN. GOOD SOIL MOISTURE IN THE NORTH AND POOR IN THE SOUTH. RESERVOIR STORAGE IS ALSO EXCELLENT IN THE NORTH AND POOR IN THE SOUTH.

SEVERE SHORTAGES WILL EXIST IN NEW MEXICO AND SOUTHERN COLORADO UNLESS SUMMER RAINFALL IS PLENTIFUL.

COLORADO -- COLORADO HAS EXTREME VARIATION IN ITS SNOW PACK THIS YEAR. SOME NEAR RECORD SNOW PACK WAS MEASURED IN THE EXTREME NORTHERN SECTION OF THE STATE. AT THE SAME TIME, MINIMUM OF RECORD SNOW PACK WAS MEASURED IN THE SOUTHERN PORTION OF THE STATE. STREAM-FLOW WILL CORRESPOND TO THE SNOW PACK. SOIL MOISTURE IS EXCELLENT IN THE AREA NORTH OF DENVER AND AVERAGE TO POOR SOUTH OF DENVER.

RESERVOIR STORAGE IS GOOD OVER MOST OF THE STATE. MOST OF THE STATE'S NUMEROUS RESERVOIRS WILL FILL DURING THE SEASON.

NEW MEXICO -- DROUGHT CONDITIONS WILL EXIST IN NEW MEXICO, UNLESS SUMMER RAINFALL IS MUCH ABOVE NORMAL. SNOW MELT STREAMS ARE EXPECTED TO FLOW NEAR A MINIMUM OF RECORD. SOME AREAS HAVE LESS SNOW THAN RECORDED IN THE LAST 36 YEARS. ONLY HIGHEST ELEVATIONS HAVE ANY SNOW IN NEW MEXICO AND VERY LITTLE REMAINS IN COLORADO. CONSERVATION WILL BE THE KEY WORD IF ANY CROPS ARE PRODUCED THIS YEAR. SOIL MOISTURE CONDITIONS ARE LISTED AS POOR AND CARRY-OVER STORAGE IS BELOW NORMAL. INFLOW TO NAVAJO RESERVOIR MAY BE ONE OF THE LOWEST ON RECORD.

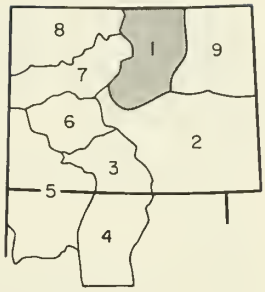
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

COLORADO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

WATER SUPPLIES ON THE UPPER SOUTH PLATTE AND ITS TRIBUTARIES WILL BE THE BEST IN MANY YEARS. ALL STREAMS IN THE AREA WILL FLOW ABOVE NORMAL. WARM WEATHER AND HEAVY PRECIPITATION COULD CAUSE HIGH WATER ON ANY OF THESE STREAMS. LATE APRIL STORMS ADDED A CONSIDERABLE AMOUNT OF MOISTURE TO THE SOILS IN THE IRRIGATED AREAS.

CARRY-OVER STORAGE IS EXCELLENT. ALL RESERVOIRS SHOULD FILL.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	117	117	100
Boulder at Orodell	70	143	49
Cache La Poudre at Canon Mouth (2)	250	116	215
Clear Cr. at Golden (3)	155	130	119
St. Vrain at Lyons (4)	95	136	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Exc.
Coal Creek	Exc.	Exc.
North Fork of South Platte	Exc.	Exc.
North Fork of Cache La Poudre	Exc.	Exc.
Ralston Creek	Exc.	Exc.
Rock Creek	Exc.	Exc.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Cumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	85	132
Boulder	3	75	129
Cache La Poudre	8	86	143
Clear Creek	5	68	106
Saint Vrain	3	133	224
South Platte	3	69	138

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	93	101
Boulder	1	76	81
Cache La Poudre	2	132	120
Clear Creek	2	--	138
Saint Vrain	2	111	117
South Platte	2	134	119

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	29.0	28.0	23.0
Black Hollow	8.0	4.3	4.0	3.5
Boyd Lake	44.0	45.4	41.3	27.7
Cache La Poudre	9.5	9.5	8.9	8.0
Carter Lake	108.9	109.0	104.5	86.4
Chambers Lake	8.8	4.9	3.4	3.3
Cheesman	79.0	77.7	79.1	50.2
Cobb Lake	34.0	21.9	18.5	9.8
Eleven Mile	97.8	96.4	96.4	72.9
Fossil Creek	11.6	10.3	10.3	7.0
Gross	43.1	34.1	36.7	17.4
Halligan	6.4	6.4	3.0	5.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Horsetooth	143.5	128.4	123.6	116.9
Lake Loveland	14.3	12.7	10.4	9.0
Lone Tree	9.2	8.8	8.1	7.9
Mariano	5.4	5.5	5.1	2.0
Marshall	10.3	9.4	8.5	4.0
Marston	18.0	16.7	16.6	15.5
Milton	24.4	16.3	16.0	11.0
Standley	42.0	34.8	37.2	11.9
Terry Lake	8.2	7.1	6.1	5.3
Union	12.7	12.7	12.7	8.0
Windsor	18.6	11.7	14.3	14.7

+ 1953-1967 period.

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FORT COLLINS, COLORADO 80521

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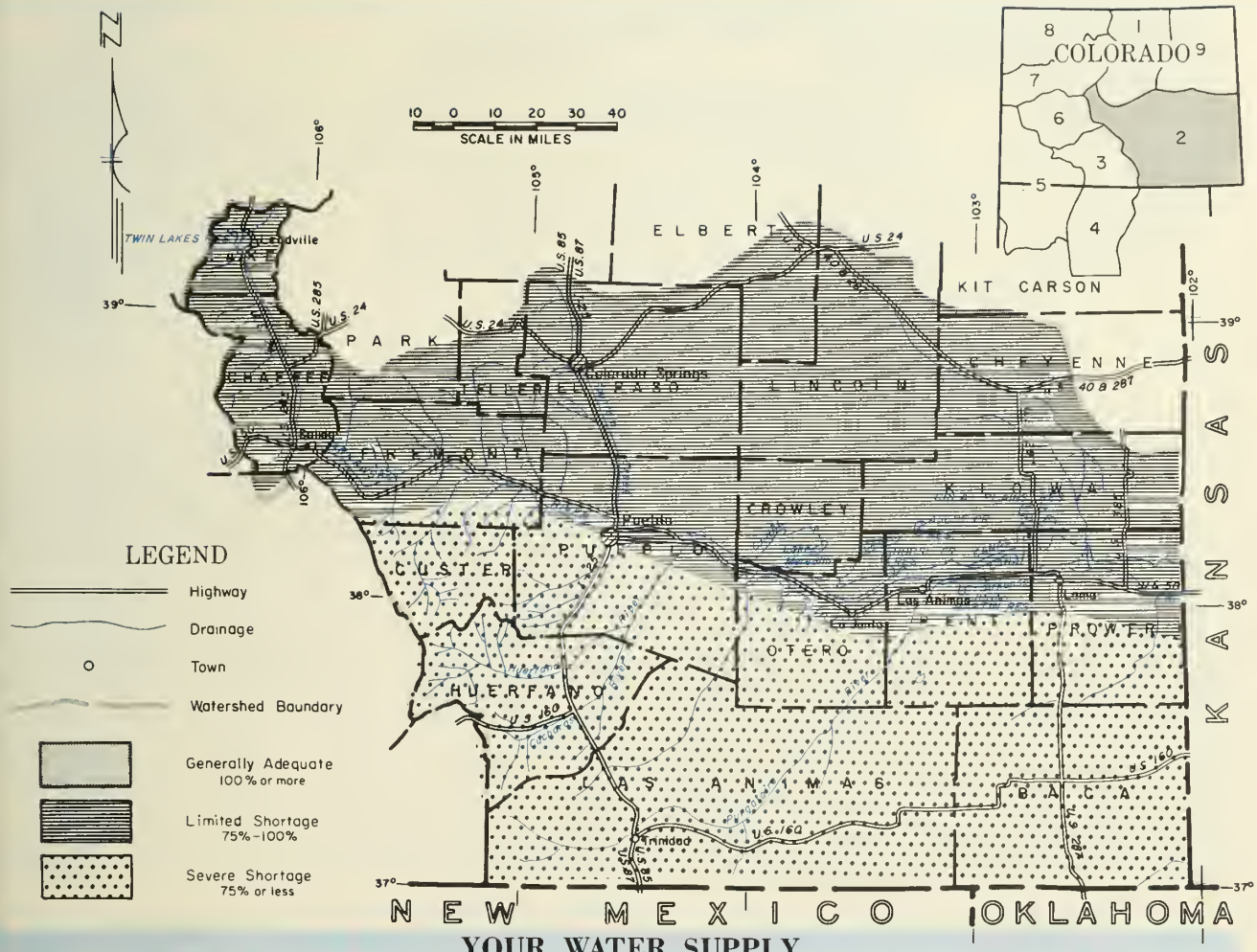
FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of
May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE MAIN STEM OF THE ARKANSAS RIVER SHOULD HAVE NEAR NORMAL SUPPLIES. THE SNOW PACK IS 95% OF NORMAL AND FORECASTS ARE FOR ABOUT AVERAGE FLOWS.

CARRY-OVER STORAGE IS ABOVE NORMAL EXCEPT IN JOHN MARTIN, WHICH IS ALMOST EMPTY. SOIL MOISTURE IN THE IRRIGATED AREAS IS LISTED AS FAIR TO GOOD.

SOUTHERN TRIBUTARIES, THE CUCHARAS AND PURGATORIE ARE IN POOR CONDITION. SNOW HAS PRACTICALLY DISAPPEARED. FLOWS ARE EXPECTED TO BE ONLY ABOUT HALF OF NORMAL. UNLESS SUMMER RAINS ARE GOOD, WATER SHORTAGES WILL EXIST.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	275	92	298
Arkansas nr Salida (1)	300	97	309
Cucharas nr LaVeta	5	42	12
Purgatorie at Trinidad	25	54	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Poor
Fountain Creek	Avg.	Fair
Grape	Avg.	Fair
Hardscrable Creek	Avg.	Poor
Huerfano	Avg.	Poor
Monument Creek	Avg.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	9	57	95
Cucharas and Purgatoire	3	0	0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	117	86
Cucharas and Purgatoire	1	103	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	45.4	17.3	10.6
Clear Creek	11.4	6.0	10.1	6.4
Cucharas	40.0	--	1.8	4.8
Great Plains	150.0	102.2	114.9	35.9
Horse Creek	26.9	9.0	19.7	4.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	2.6	57.0	67.9
Meredith	41.9	24.2	24.8	9.3
Model	15.0	0	2.4	2.4
Turquoise	130.0	51.3	42.8	6.2
Twin Lakes	57.9	27.1	37.3	17.7

+ 1953-1967 period

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SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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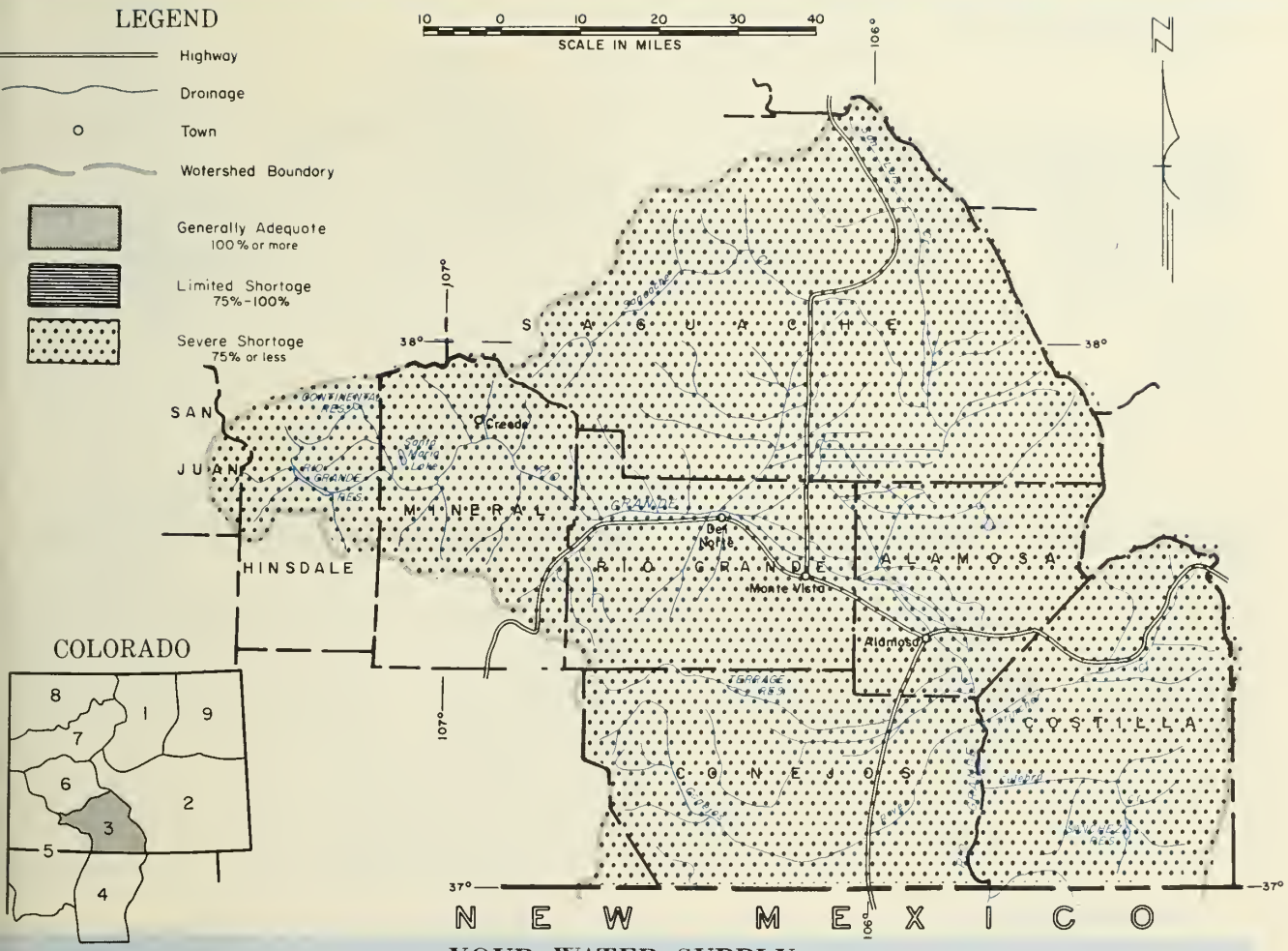
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY FORECASTS REMAIN MUCH BELOW AVERAGE ON THE RIO GRANDE BASIN. MOST FORECASTS APPROACH THE MINIMUM ON RECORD. THE SNOW PACK RANGES FROM ZERO ON CULEBRA, 31% ON CONEJOS, 61% ON RIO GRANDE AND 83% ON THE ALAMOSA. THE WOLF CREEK PASS SNOW COURSE HAS THE LOWEST READING SINCE THE MINIMUM IN 1954. TOTAL STORAGE ON SIX RESERVOIRS IS 85,200 ACRE FEET OR 158% OF THE AVERAGE. SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS IS ABOVE AVERAGE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	37	60	62
Conejos nr Mogote (1)	110	60	182
Culebra at San Luis (2)	10	53	19
Rio Grande at 30 Mile Bridge (3)	85	73	117
Rio Grande nr Del Norte (3)	270	62	438
South Fork at South Fork	65	59	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera	Poor	Poor

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change i storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	80	83
Conejos	3	27	31
Culebra	2	0	0
Rio Grande	10	60	61

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	123	113
Conejos	1	103	83
Culebra	1	102	102
Rio Grande	3	112	107

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	9.6	6.9	5.8
Platoro	60.0	2.9	4.0	8.1
Rio Grande	45.8	42.0	29.4	15.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	17.5	20.0	12.3
Santa Maria	45.0	11.2	6.9	6.9
Terrace	17.7	2.0	9.9	5.7

+ 1953-1967 period

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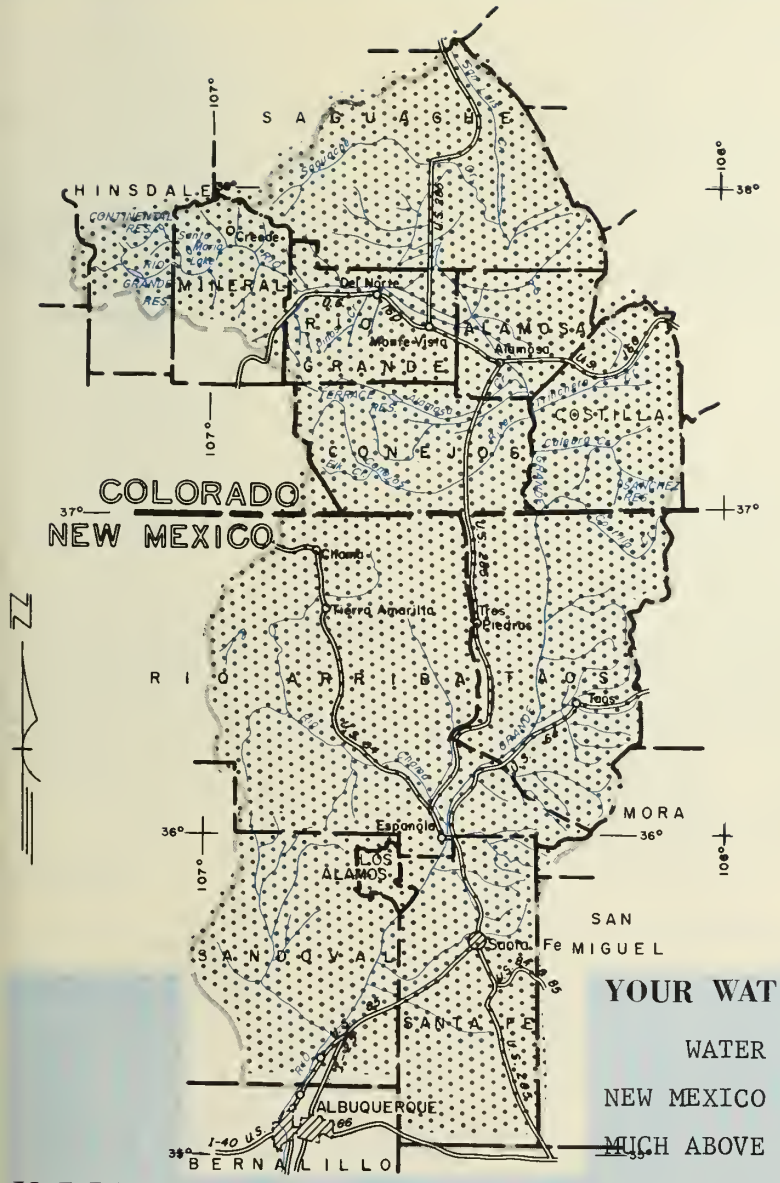
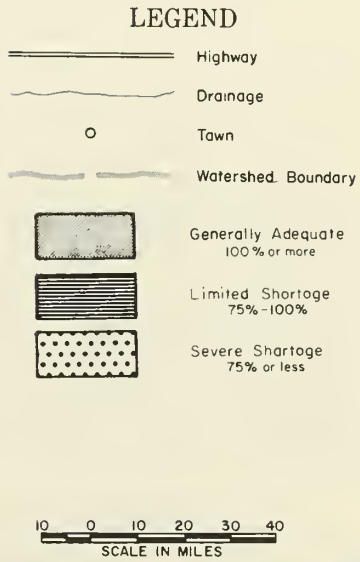
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





YOUR WATER SUPPLY

WATER SUPPLIES WILL BE VERY POOR IN NEW MEXICO UNLESS SUMMER PRECIPITATION IS MUCH ABOVE NORMAL. CURRENT SNOW RUNOFF IS EXPECTED TO BE NEAR A MINIMUM OF RECORD. SOIL MOISTURE IS REPORTED AS FAIR EXCEPT AROUND THE TAOS AREA WHERE GOOD CONDITIONS EXIST. RESERVOIR STORAGE IS LESS THAN NORMAL, BUT WILL PROVIDE SOME MUCH NEEDED WATER. RAINFALL MUST BE ABOVE NORMAL TO PRODUCE AVERAGE CROPS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	6	33	18
Pecos at Pecos	20	49	41
Rio Chama to ElVado	100	53	188
Rio Grande at Otowi (2)	240	47	513
Rio Grande at San Mar. (2)	100	30	334
Rio Hondo nr Valdez	7	47	15
Red River at Mouth nr Questa	20	63	32

The forecast of the Rio Grande at San Marcial is 15% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costillo Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
No snow measurements scheduled this month.			

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
No soil moisture readings scheduled this month.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	33	85	64
Caballo	344	57	53	75
Conchas	273	130	233	150
Elephant Butte	2195	291	434	322

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
ElVado	195	21	8	31
McMillen-Avalon	32	12	12	12

+ 1953-1967 period.

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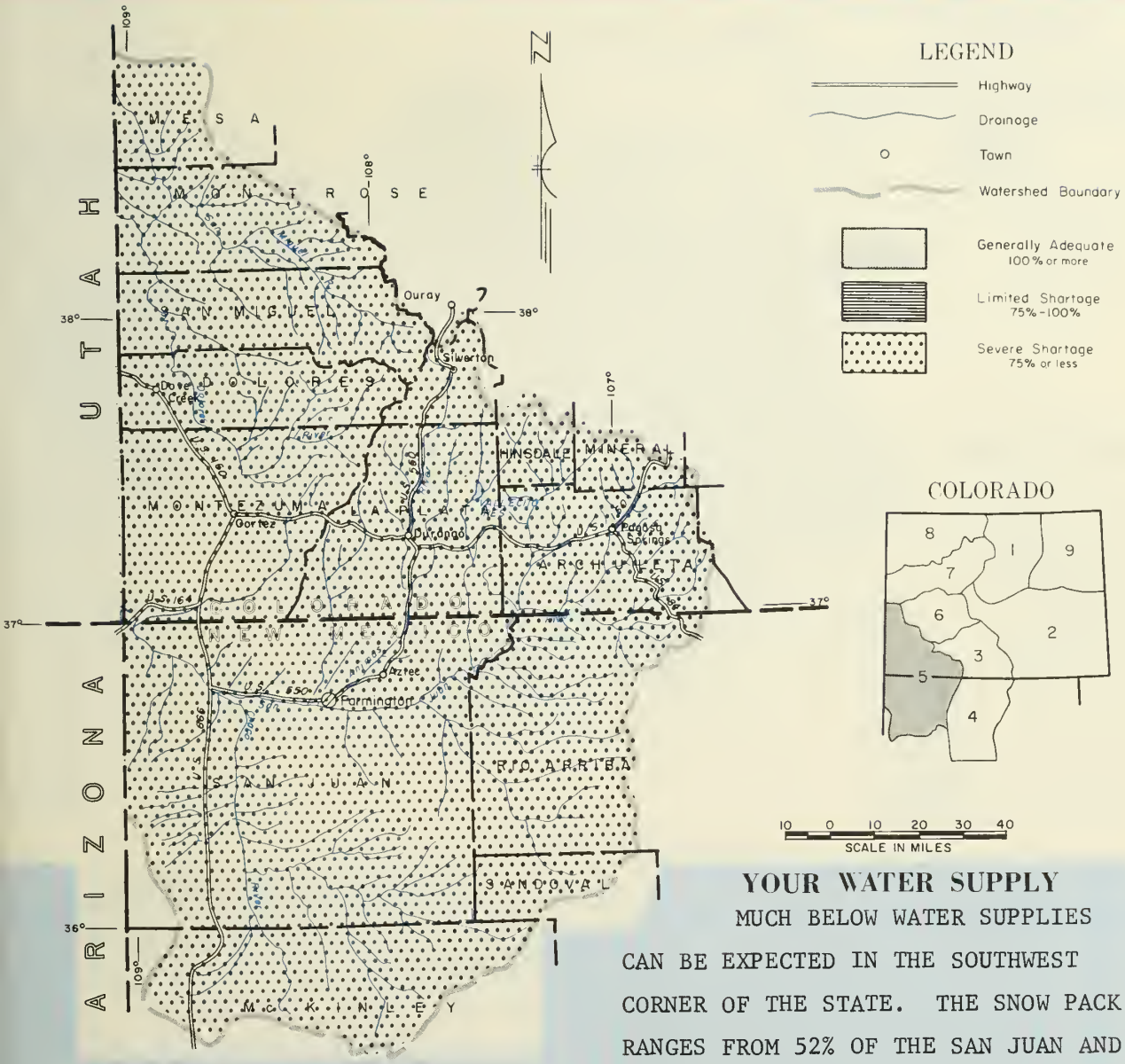
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

MUCH BELOW WATER SUPPLIES CAN BE EXPECTED IN THE SOUTHWEST CORNER OF THE STATE. THE SNOW PACK RANGES FROM 52% OF THE SAN JUAN AND DOLORES TO 74% ON THE ANIMAS.

RESERVOIR STORAGE IS EXCELLENT WITH GROUNDHOG AT 211%, LEMON 160% AND VALLECITO 116% OF AVERAGE.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	300	73	409
Dolores at Dolores	130	56	231
La Plata at Hesperus	15	63	24
Los Pinos at Bayfield (1)	115	59	194
Piedra Cr. at Piedra	75	46	163
San Juan at Carracas	210	55	379
Inflow to Navajo Res. (1) (Apr-Jul)	310	50	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Poor	Poor
Mancos	Poor	Poor
San Miguel	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	61	74
Dolores	4	30	52
San Juan	3	56	52

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	121	85
Dolores	3	89	78
San Juan	2	123	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	19	14	9
Lemon	40	31	32	19
Navajo	1696	865	876	326
Vallecito	126	95	83	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

WATER SUPPLIES WILL BE BELOW AVERAGE ON THE GUNNISON RIVER AND ITS TRIBUTARIES. STREAMFLOW FORECASTS DROPPED 4% TO 12% FROM LAST MONTH'S FIGURES. ABOVE AVERAGE PRECIPITATION IS NEEDED TO PROVIDE AVERAGE STREAMFLOW. TAYLOR PARK RESERVOIR CONTAINS 84,000 ACRE FEET, ABOUT 25,000 ACRE FEET ABOVE AVERAGE. BLUE MESA RESERVOIR IS BELOW LAST YEAR.

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GRAND JUNCTION, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison Rv. inflow to Blue Mesa	560	73	767
Gunnison nr Grand Junction (1)	950	84	1137
Surface Creek nr Cedaridge	14	88	16
Uncompahgre at Colona	85	66	129

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Exc.
Taylor	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	62	87
Surface Creek	3	76	96
Uncompahgre	3	56	88

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	100	100
Surface Creek	1	108	126
Uncompahgre	1	108	126

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	374	426	--
Morrow Point	121	115	117	--
Taylor	106	84	54	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

OFFICIAL BUSINESS

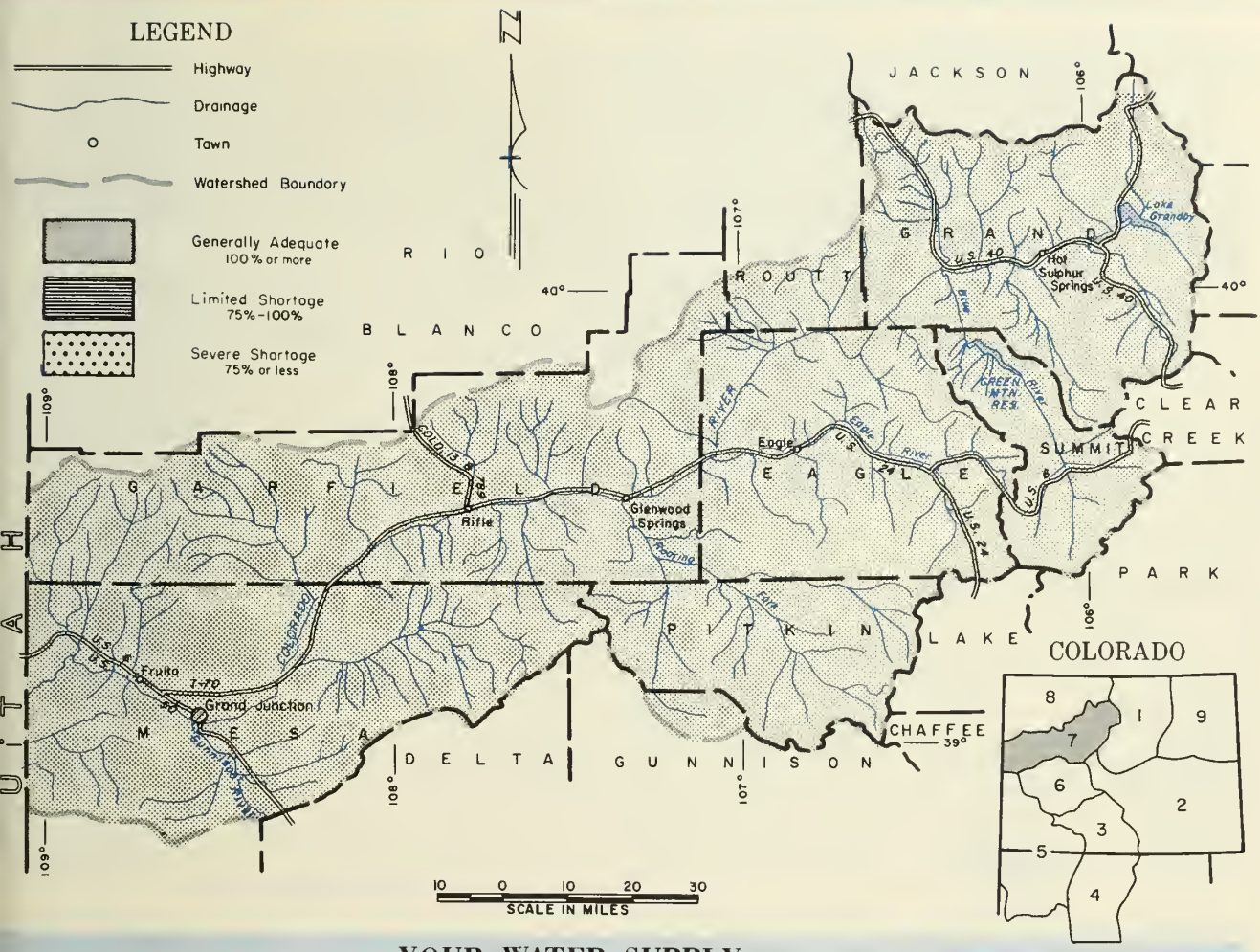
POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE MORE THAN ADEQUATE THIS SUMMER ON THE COLORADO RIVER AND ITS TRIBUTARIES ABOVE CAMEO. STREAMFLOW FORECASTS RANGE FROM 105% ON THE ROARING FORK TO 142% ON THE WILLIAMS FORK. THE COLORADO RIVER NEAR DOTSERO IS 116% OF THE 1953-67 AVERAGE. CARRY-OVER STORAGE IN THE RESERVOIRS IS EXCELLENT AND MOST ARE ABOVE LAST YEAR'S. SOIL MOISTURE CONDITIONS ARE GOOD IN THE MOUNTAIN AND IRRIGATED SOILS.

This report prepared by
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DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue abv Green Mt. (1)	270	114	236
Colo. Rv. inflow to Granby Res. (2)	275	126	219
Colo. Rv. nr Dots. (3)	1600	116	1375
Roaring Fork at Glenwood Springs (4)	730	105	692
Williams Fork nr. Par. (5)	85	142	60
Willow Creek inflow to Willow Cr. Reservoir	60	130	46
Colo. nr Cameo (6)	2480	112	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Exc.
Eagle River	Exc.	Exc.
Gypsum Creek	Exc.	Exc.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	67	110
Colorado	20	81	141
Plateau	3	79	93
Roaring Fork	7	68	107
Williams Fork	3	78	136
Willow	2	62	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	109	120
Colorado	5	104	107
Roaring Fork	1	101	108
Willow	1	101	129

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	246	239	223
Granby	466	351	226	205
Green Mountain	147	48	37	43
Homestake	43	11	14	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	50	57	--
Vega	32	25	16	13
Williams Fork	97	53	39	34
Willow Creek	9	3	9	--

+ 1953-1967 period.

Return if not delivered
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SOIL CONSERVATION SERVICE
SNOW SURVEY
COLORADO STATE UNIVERSITY
FORT COLLINS, COLORADO 80521

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FIRST CLASS MAIL

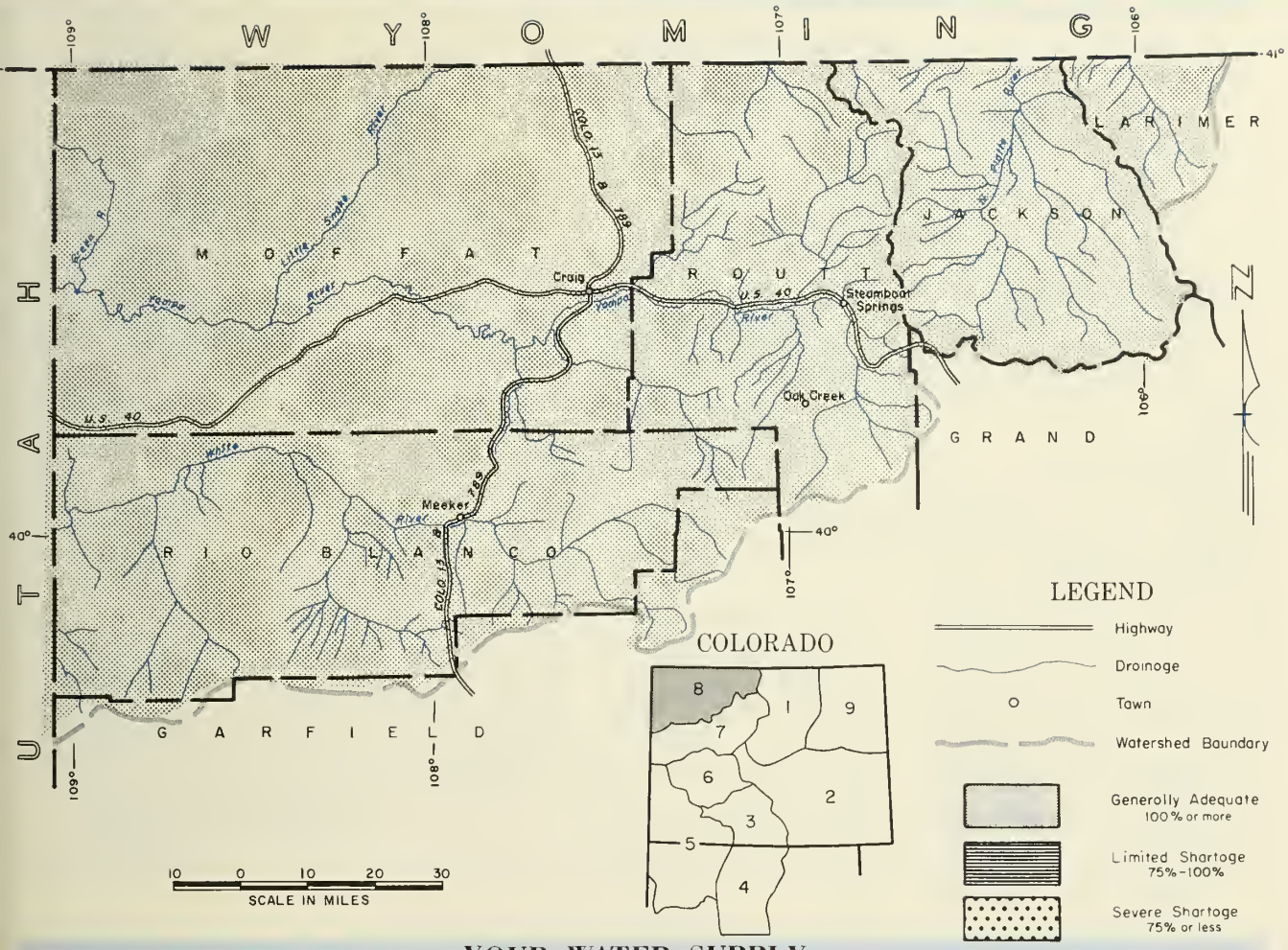
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS ARE MUCH ABOVE AVERAGE ON ALL STREAMS IN THIS AREA. FORECASTS ON THE NORTH PLATTE AT 190% AND LITTLE SNAKE AT 170% ARE NEAR THE MAXIMUM RECORD. OTHER STREAM FORECASTS RANGE FROM 123% TO 159%. SOIL MOISTURE CONDITIONS ARE ABOVE AVERAGE IN BOTH THE IRRIGATED AND MOUNTAIN AREAS.

This report prepared by

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DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	245	128	191
Laramie at Jelm	165	159	104
Little Snake at Lily	470	170	277
North Platte at Northgate	410	190	225
White nr Meeker	360	123	293
Yampa nr Maybell	1200	141	853
Yampa at Steamboat Springs	365	140	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	3	66	142
Laramie	3	97	131
North Platte	5	86	135
White	2	70	117
Yampa	6	87	141

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	1	134	117
North Platte	2	113	118
Yampa	1	104	85

+ 1953-1967 period.

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FIRST CLASS MAIL

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

May 1, 1971

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

WATER SUPPLIES WILL BE EXCELLENT THIS YEAR ON THE SOUTH PLATTE AND ITS TRIBUTARIES. FORECASTS RANGE FROM 116% ON THE CACHE LA POUDRE TO 143% ON THE BOULDER AT ORODELL. THE LATE APRIL STORM PRODUCED HIGH WATER ON MANY OF THE STREAMS AND MORE CAN BE EXPECTED.

SOILS ARE IN EXCELLENT CONDITION IN THE IRRIGATED AREAS.

CARRY-OVER STORAGE IS ABOVE NORMAL AND SHOULD ALL FILL AGAIN.

THIS YEAR COULD BE ONE OF THE BEST WATER YEARS IN THE LAST DECADE.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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Issued by
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DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	117	117	100
Boulder at Orodell	70	143	49
Cache La Poudre at Canon Mouth (2)	250	116	215
Clear Creek at Golden (3)	155	130	119
Saint Vrain at Lyons (4)	95	136	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Exc.
South Platte from Fort Morgan to Sterling	Exc.	Exc.
South Platte below Sterling	Exc.	Exc.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flou plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	85	132
Boulder	3	75	129
Cache La Poudre	8	86	143
Clear Creek	5	68	106
Saint Vrain	3	133	224
South Platte	3	69	138

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	93	101
Boulder	1	76	81
Cache La Poudre	2	132	120
Clear Creek	2	--	138
Saint Vrain	2	111	117
South Platte	2	134	119

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	109.0	104.5	86.4
Cheesman	79.0	77.7	79.1	50.2
Eleven Mile	97.8	96.4	96.4	72.9
Empire	37.7		33.9	29.0
Horsetooth	143.5	128.4	123.6	116.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4		34.4	33.7
Julesburg	28.2	23.3	23.6	22.1
Prewitt	32.8	28.8	26.8	17.5
Point of Rocks	70.0	68.9	70.3	60.8
Riverside	57.5		60.5	51.0

+ 1953–1967 period.

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POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

FIRST CLASS MAIL

APPENDIX I

W COURSE MEASUREMENTS as of May 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	AVG. 53 67
TH PLATTE BASIN					
aramie River					
Deadman Hill	5/3	60	23.6	26.1	17.1
McIntyre	4/26	33	11.7	15.2	9.4
Roach	4/27	77	23.9	20.0	18.7
orth Platte River					
Cameron Pass	4/28	96	38.6	37.8	28.4
Columbine Lodge	4/27	61	27.1	30.4	21.4
Northgate	4/28	14	5.5	9.3	2.7
Park View	4/26	25	7.9	13.0	5.6
Willow Cr. Pass(B)	4/26	34	12.8	16.5	10.0
TH PLATTE BASIN					
oulder Creek					
Baltimore	4/29	16	5.8	12.5	2.9
Boulder Falls	4/28	54	16.8	19.6	11.9
University Camp	4/28	73	23.1	28.9	20.7
ig Thompson River					
Deer Ridge	4/30	18	4.4	9.4	2.6
Hidden Valley	4/28	53	14.3	16.8	12.0
Lake Irene (B)	4/26	82	29.2	31.1	22.4
Long's Peak	5/1	54	16.4	19.4	12.0
Two Mile	4/28	80	22.5	25.8	17.0
ache La Poudre					
Bennett Creek	4/29	29	9.1	11.5	- -
Big South	5/2	0	0.0	0.4	0.6
Cameron Pass	4/28	96	38.6	37.8	28.4
Chambers Lake	5/2	15	6.9	12.5	5.3
Deadman Hill	5/3	60	23.6	26.1	17.1
Hour Glass Lake	4/29	30	9.4	12.1	5.6
Joe Wright	4/28	87	33.7	35.8	- -
Lost Lake	5/2	34	11.7	17.4	8.9
Pine Creek	4/30	3	1.6	1.0	0.1
Red Feather	4/30	30	8.5	8.9	4.4
lear Creek					
Berthoud Falls	4/29	48	17.0	22.5	12.1
Empire	4/29	20	6.8	14.1	6.8
Grizzly Peak (B)	4/29	70	24.5	29.5	19.4
Loveland Lift	4/30	64	20.3	29.9	25.3
Loveland Pass	4/30	39	14.4	26.9	14.5
aint Vrain River					
Copeland Lake	4/29	26	11.8	5.7	1.7
Ward	4/28	34	9.8	10.8	5.4
Wild Basin	4/29	59	21.7	16.0	12.2
outh Platte River					
Como	4/28	11	4.1	13.5	- -
Geneva Park	4/29	3	0.9	8.0	1.2
Horseshoe Mt.	4/27	35	11.2	17.0	- -
Hoosier Pass	4/28	41	13.4	17.5	12.0
Jefferson Creek	4/28	22	13.8	15.5	7.1
Mosquito	4/27	13	3.7	16.2	- -
Trout Creek Pass	4/27	1	0.1	6.4	- -
ANSAS BASIN					
rkansas River					
Bigelow Divide	4/27	16	5.3	8.6	2.2
Cooper Hill (B)				17.1	11.1
East Fork	4/28	22	7.8	12.2	7.4
Four Mile Park	4/29	1	0.3	7.2	1.0
Fremont Pass	4/28	52	17.7	22.8	17.9
Garfield	4/29	17	5.9	14.6	8.5
Monarch Pass	4/29	38	14.0	20.9	16.5
Tennessee Pass	4/29	17	6.7	13.0	7.7
Twin Lakes Tunnel	4/28	30	9.9	12.2	8.7
Westcliffe	4/28	0	0.0	7.9	1.0

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	AVG. 53 67
Cucharas River					
Blue Lakes	4/30	0	0.0	0.6	0.5
Cucharas Pass	4/30	0	0.0	10.0	- -
LaVeta Pass (B)	4/30	0	0.0	4.3	1.6
Purgatoire River					
Bourbon	4/29	0	0.0	7.3	1.7
RIO GRANDE BASIN-Colo					
Alamosa River					
Silver Lakes	4/29	0	0.0	0.6	0.6
Summitville	4/28	51	16.2	19.6	19.0
Conejos River					
Cumbres	4/29	9	3.9	15.2	12.6
Platoro	4/29	9	3.3	11.6	9.9
River Springs	4/29	0	0.0	0.0	0.5
Culebra River					
Brown Cabin				1.9	- -
Cottonwood (B)					
Culebra	4/29	0	0.0	7.0	3.5
LaVeta Pass (B)	4/30	0	0.0	4.3	1.6
Trinchera (B)				9.6	- -
Rio Grande					
Cochetopa Pass	4/28	8	2.2	7.7	2.6
Grayback	4/29	9	3.4	16.6	- -
Hiway	4/29	55	19.8	23.4	28.1
Lake Humphrey	4/29	0	0.0	0.8	0.4
Love Lake	4/29	0	0.0	9.8	- -
Pass Creek	4/29	0	0.0	5.2	3.9
Pool Table	4/29	0	0.0	4.1	1.9
Porcupine	4/29	14	4.6	6.1	6.6
Santa Maria	4/29	0	0.0	0.0	0.5
Upper Rio Grande	4/28	3	1.0	1.8	1.8
Wolf Cr. Pass	4/29	17	7.3	21.1	22.0
Wolf Cr. Summit	4/29	65	24.3	28.9	30.0
SAN JUAN-DOLORES					
Animas River					
Cascade	4/27	0	0.0	4.2	3.6
Lemon	4/27	0	0.0	1.3	- -
Mineral Creek	4/28	17	6.3	16.1	10.5
Molas Lake	4/28	7	2.4	12.1	6.8
Purgatory				18.2	- -
Red Mountain	4/28	70	32.0	36.6	30.3
Silverton Sub-Sta	4/27	0	0.0	0.0	0.1
Spud Mountain	4/28	37	13.7	20.4	22.2
Dolores River					
Lizzard Head	4/29	23	8.3	17.3	12.9
Lone Cone	4/30	9	3.1	15.1	- -
Rico	4/29	0	0.0	1.3	0.4
Telluride	4/29	4	1.4	7.3	0.8
Trout Lake	4/29	11	2.1	13.7	8.5
San Juan River					
Chama Divide (B)	4/29	0	0.0	0.0	- -
Chamita (B)	4/29	0	0.0	0.0	- -
Upper San Juan	4/29	20	8.9	21.7	26.6
Wolf Cr. Pass(B)	4/29	17	7.3	21.1	22.0
Wolf Cr. Summit	4/29	65	24.3	28.9	30.0

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1971

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53-67
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/30	52	20.6	27.1	21.0
Black Mesa					15.8
Blue Mesa	4/29	0	0.0	8.1	1.9
Butte	4/27	43	12.6	17.9	- -
Cochetopa Pass (B)	4/28	8	2.2	7.7	2.6
Crested Butte	4/27	7	2.0	10.1	7.1
Keystone	4/27	44	16.2	19.2	17.1
Lake City	4/29	8	2.2	9.5	3.5
Long Gulch					
Mesa Lakes (B)	4/30	38	14.9	21.3	15.1
McClure Pass	4/28	21	7.8	17.0	9.3
Park Cone	4/28	14	3.8	12.1	7.7
Park Reservoir	4/28	55	21.5	26.3	23.6
Porphyry Creek	4/29	47	16.5	19.6	16.5
Tomichi	4/29	31	10.4	13.8	10.0
Surface Creek					
Alexander Lake	4/30	52	20.6	27.1	21.0
Mesa Lakes (B)	4/30	38	14.9	21.3	15.1
Park Reservoir	4/28	55	21.5	26.3	23.6
Uncompahgre River					
Ironton Park	4/29	0	0.0	15.6	6.7
Red Mountain Pass	4/28	70	32.0	36.6	30.3
Telluride (B)	4/29	4	1.4	7.3	0.8
COLORADO BASIN (Main)					
Blue River					
Blue River	4/27	15	4.8	12.5	6.4
Fremont Pass	4/28	52	17.7	22.8	17.9
Frisco	4/29	15	4.8	11.4	4.6
Grizzley Peak	4/29	70	24.5	29.5	19.4
Hoosier Pass (B)	4/28	41	13.4	17.5	12.0
Shrine Pass	4/29	55	20.6	27.9	18.7
Snake River	4/29	12	3.4	11.6	3.5
Summit Ranch	4/27	22	6.7	10.6	4.8
Colorado River					
Arrow	4/28	43	17.5	18.6	9.2
Berthoud Pass	4/27	57	21.1	22.8	14.3
Berthoud Summit	4/29	73	26.3	32.4	20.6
Cooper Hill	5/4	36	13.4	17.1	11.1
Fiddler Gulch	NS			18.8	14.7
Glen Mar Ranch	4/26	18	6.4	9.1	3.8
Gore Pass	4/27	30	10.5	13.8	7.3
Grand Lake	4/27	20	6.3	8.4	3.4
Lake Irene	4/26	82	29.2	31.1	22.4
Lapland	4/28	34	10.2	14.8	6.9
Lulu	4/29	74	28.3	29.3	18.3
Lynx Pass	4/27	33	12.0	15.3	7.1
McKenzie Gulch	4/28	0	0.0	4.9	0.6
Middle Fork	4/26	20	6.7	10.3	5.7
Milner	4/26	52	16.2	17.8	12.0
North Inlet	4/27	27	7.8	12.0	5.9
Pando	4/28	23	8.4	14.7	7.7
Phantom Valley	4/26	35	11.0	13.1	6.2
Ranch Creek	4/28	43	14.2	14.9	9.0
Tennessee Pass	4/29	17	6.7	13.0	7.7
Vail Pass	4/29	53	19.9	26.4	15.0
Vasquez	4/28	46	17.3	18.5	12.4

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53-6
Roaring Fork River					
Aspen	4/28	56	17.9	26.7	16.
Chapman	4/28	40	14.9	18.0	-
Independence Pass	4/28	50	18.1	20.4	16.
Ivanhoe	4/29	56	20.6	24.6	17.
Kiln	4/29	36	12.6	13.4	-
Last Chance	4/29	38	13.1	14.5	-
Lift	4/28	61	21.2	24.9	18.
McClure Pass	4/28	21	7.8	17.0	9.
Nast	4/28	4	1.0	6.8	1.
North Lost Trail	4/28	14	5.4	15.5	7.
Williams Fork River					
Glen Mar Ranch	4/26	18	6.4	9.1	3.
Jones Pass	4/27	58	20.8	24.1	15.
Middle Fork	4/26	20	6.7	10.3	5.
Willow Creek					
Granby	4/26	13	3.7	10.2	3.
Willow Cr. Pass	4/26	34	12.8	16.5	10
Plateau Creek					
Mesa Lakes	4/30	38	14.9	21.3	15
Park Reservoir	4/28	55	21.5	26.3	23
Trickle Divide	4/28	62	24.4	29.8	26
YAMPA BASIN					
Elk River					
Clark	4/29	4	1.5	9.4	3
Elk River	4/29	45	18.7	20.6	13
Hahn's Peak	4/29	23	9.0	14.1	7
White River					
Burro Mountain	4/29	39	16.1	22.2	14
Rio Blanco	4/28	30	11.5	17.0	9
Yampa River					
Bear River	4/30	25	8.6	15.9	7
Columbine (B)	4/27	61	27.1	30.4	21
Dry Lake	4/27	53	21.1	23.8	15
Lynx Pass (B)	4/27	33	12.0	15.3	7
Rabbit Ears	4/27	89	37.6	37.7	25
Yampa View	4/27	34	13.8	15.8	8

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1971

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	4/27	11.1	9.1	7.1	8.4
Willow Pass	4/26	9.5	9.0	8.9	7.0
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	4/27	6.9	5.3	4.0	4.3
Big Thompson River					
Beaver Dam	4/27	7.1	5.2	5.5	4.7
Guard Station	4/27	6.9	4.7	3.7	4.5
Two Mile	4/27	9.1	4.9	6.7	5.4
Clear Creek					
Clear Creek	4/30	9.5	8.7	7.4	5.7
Hoop Creek	4/30	4.9	3.4	- -	3.1
Cache La Poudre River					
Feather	5/3	10.1	9.8	7.6	7.9
Laramie Road	5/1	12.4	10.2	7.6	8.7
South Platte River					
Hoosier Pass	4/28	7.8	6.4	5.2	5.4
Kenosha Pass	4/28	4.4	4.2	2.7	3.5
ARKANSAS BASIN					
Arkansas River					
Garfield	4/29	6.7	4.6	4.3	4.8
Leadville	4/27	7.8	3.8	3.2	4.9
Twin Lakes Tunnel	4/28	4.5	2.6	1.9	3.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	4/27	10.7	7.3	7.1	8.8
Rio Grande					
Alberta Park	4/28	8.2	5.8	3.9	5.7
Bristol View	4/29	6.1	6.0	5.7	4.7
LaVeta Pass	4/27	11.9	11.8	11.5	11.6
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	4/28	9.1	5.9	5.6	7.7
Mineral Creek	4/28	4.7	3.4	3.9	4.5
Molas Lake	4/28	9.4	6.6	3.6	6.6
Dolores River					
Dolores	4/29	19.6	5.9	9.0	12.2
Lizzard Head	4/29	11.8	5.4	4.7	8.2
Rico	4/29	13.8	10.4	10.5	7.3
GUNNISON BASIN					
Gunnison River					
King	4/29	3.3	2.3	2.3	2.3
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	4/27	4.2	3.6	3.3	3.0
Colorado River					
Berthoud Pass	4/27	3.9	3.4	3.3	2.9
Gore	4/27	4.9	4.5	4.2	4.1
Grand Mesa	4/28	12.5	12.5	11.6	9.9
Ranch Creek	4/28	8.7	6.5	6.5	6.2
Vail	4/29	12.3	9.0	9.0	10.5
Roaring Fork River					
Placita	4/29	9.3	8.2	8.1	7.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	4/29	19.0	12.8	7.8	15.0

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New Mexico State Engineer
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Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- Weather Bureau

War Department

- Army Engineer Corps

Atomic Energy Commission

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Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
COLORADO STATE UNIVERSITY
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AT URBANA-CHAMPAIGN
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

MAY 15, JUNE 1, 1971
and
SPECIAL MEASUREMENTS

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountoin snowpack.

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Copies of state and local reports may also be obtoined from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portlond, Oregon 97205
Utoh	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

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U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA-SCS-PORTLAND, OREG. 1970

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1971

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1953-67 Average	Jan. 1 Last Year	Feb. 1 1953-67 Average
Berthoud Summit	12/28	38	10.3	7.2	13.4	10.8
Columbine Lodge	12/29	52	11.7	7.2	10.7	15.6
Fremont Pass	12/29	29	7.3	5.8	10.6	9.5
Mesa Lakes	12/30	39	10.5	6.5	8.5	10.3
Porphyry Creek	12/29	35	7.8	6.9	11.8	10.1
Red Mountain	12/28	57	17.0	11.4	15.2	17.0
Spud Mountain	12/28	46	11.4	9.7	9.5	15.0
Tennessee Pass	12/29	18	3.1	3.7	9.6	6.2
Two Mile	12/30	32	6.8	5.9	10.5	7.9
University Camp	12/28	31	7.8	7.1	11.1	10.9
Upper San Juan	12/29	61	15.2	13.6	10.5	19.4
Vail Pass	12/29	37	9.3	5.6	10.2	10.0
Wolf Creek Pass	12/29	58	14.2	13.1	12.0	17.8
Wolf Creek Summit	12/29	59	14.7	13.8	14.3	17.7

All but the Tennessee Pass snow course on the Arkansas Drainage indicate above normal snow pack.

The Yampa, Animas, Main Stem of Colorado, and Dolores indicate 150% of normal and are near February first averages.

Carry-over storage is excellent, especially on the South Platte Drainage.

Mountain soils are slightly wetter than usual and will tend to increase runoff in some areas.

The first of the year storm is not indicated in these readings. This storm was fairly wide spread and increased the snow pack in some areas as much as an inch of water.

c

May 15, 1971

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Averages Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	May 15 Average	May 15 Last Year	May 1 1953-67
Berthoud Summit	5/12	64	27.0	19.3	27.4	20.6
Cameron Pass	5/13	87	42.0	25.6	34.9	28.4
Columbine Lodge	5/14	32	15.5	12.5	24.7	21.4
Fremont Pass	5/13	47	17.9	15.5	19.7	17.9
Mesa Lakes	5/13	28	11.0	8.8	14.8	15.1
Milner	5/15	35	14.6	7.5	12.3	12.0
Park View	5/13	11	3.4	2.1	6.0	5.6
Porphyry Creek	5/14	36	13.4	13.4	17.5	16.5
Red Mountain	5/13	65	30.5	30.3	31.5	25.4
Spud Mountain	5/13	34	12.4	18.9	15.4	22.2
Tennessee Pass	5/12	0	0.0	2.4	8.9	7.7
Two Mile	5/14	66	22.9	16.4	24.4	17.0
University Camp	5/17	55	22.1	18.4	21.3	20.7
Upper San Juan	5/14	13	6.2	18.6	14.9	26.6
Vail Pass	5/13	40	17.1	10.2	18.9	15.0
Willow Creek Pass	5/13	24	9.2	5.4	12.1	10.0
Wolf Creek Pass	5/14	9	3.4	14.5	15.5	22.0
Wolf Creek Summit	5/13	65	25.7	31.4	25.9	30.0

The snow pack remains much above normal in northern Colorado and considerably below normal in southern Colorado. Water shortages will occur on the Rio Grande, San Juan and Animas Drainages. The areas affected by the Cucharas and Purgatorie Rivers can also expect short water supplies. These areas should be very careful in managing their water.

Some high water can be expected on the South Platte and its tributaries. The North Platte, Yampa, White, and Elk Rivers could have considerably high water if spring rains occur before snow has melted.

c

June 1, 1971

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Section
Soil Conservation Service
Colorado State University
Fort Collins, Colorado 80521

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland,
Soil Conservation Service

	Current Information			Past Record Averages Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	June 1 Average	June 1 Last Year	May 1 1953-67
Berthoud Summit	5/28	55	24.0	11.5	15.7	20.6
Cameron Pass	5/27	82	42.5	18.2	22.4	28.4
Columbine Lodge	6/1	3	.9	3.0	3.8	21.4
Fremont Pass	5/28	31	13.0	7.7	7.7	17.9
Joe Wright	5/27	68	31.5	- -	- -	33.7*
Mesa Lakes	5/27	7	2.7	0.7	0.0	15.1
Milner Pass	5/31	18	6.7	- -	1.7	12.0
Park View	5/27	0	0.0	0.1	0.0	5.6
Porphyry Creek	5/29	22	7.8	6.6	1.6	16.5
Red Mountain	5/26	46	24.4	12.2	15.5	25.4
Spud Mountain	5/26	28	12.9	10.6	6.5	22.2
Tennessee Pass	5/28	0	0.0	0.0	0.0	7.7
Two Mile	5/30	54	21.0	12.7	17.4	17.0
University Camp	5/29	45	20.2	10.7	10.6	20.7
Upper San Juan	5/28	0	0.0	5.2	0.7	26.6
Vail Pass	5/28	21	9.5	3.3	4.9	15.0
Willow Creek Pass	5/27	6	2.6	0.9	0.5	10.0
Wolf Creek Pass	5/28	0	0.0	5.5	0.0	22.0
Wolf Creek Summit	5/28	55	22.4	23.7	18.0	30.0

* May 1, 1971

Snow melt has been retarded by the cool, wet spring. Cameron Pass in Northern Colorado is the maximum of record for June 1st. Many of the other high elevation courses are near the maximum.

This cool weather has reduced flows and will have a tendency to reduce overall flow because of evaporation. Even with the slow melt many streams are near flood stage. Several days of very warm weather would cause high water in many northern drainages. Southern Colorado still has a little snow in the trees. Snow melt has been slowed in this area also.

Forecasts have not been increased. Southern Colorado will still have shortages. Northern Colorado can still expect one of the best water supply years.

c

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EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1972

Water Supply Outlook

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Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

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Mesa Lakes	12/30	41	11.5	6.5	10.5	10.3
Porphyry Creek	12/30	36	8.0	6.9	7.8	10.1
Red Mountain	12/30	67	19.1	11.4	17.0	17.0
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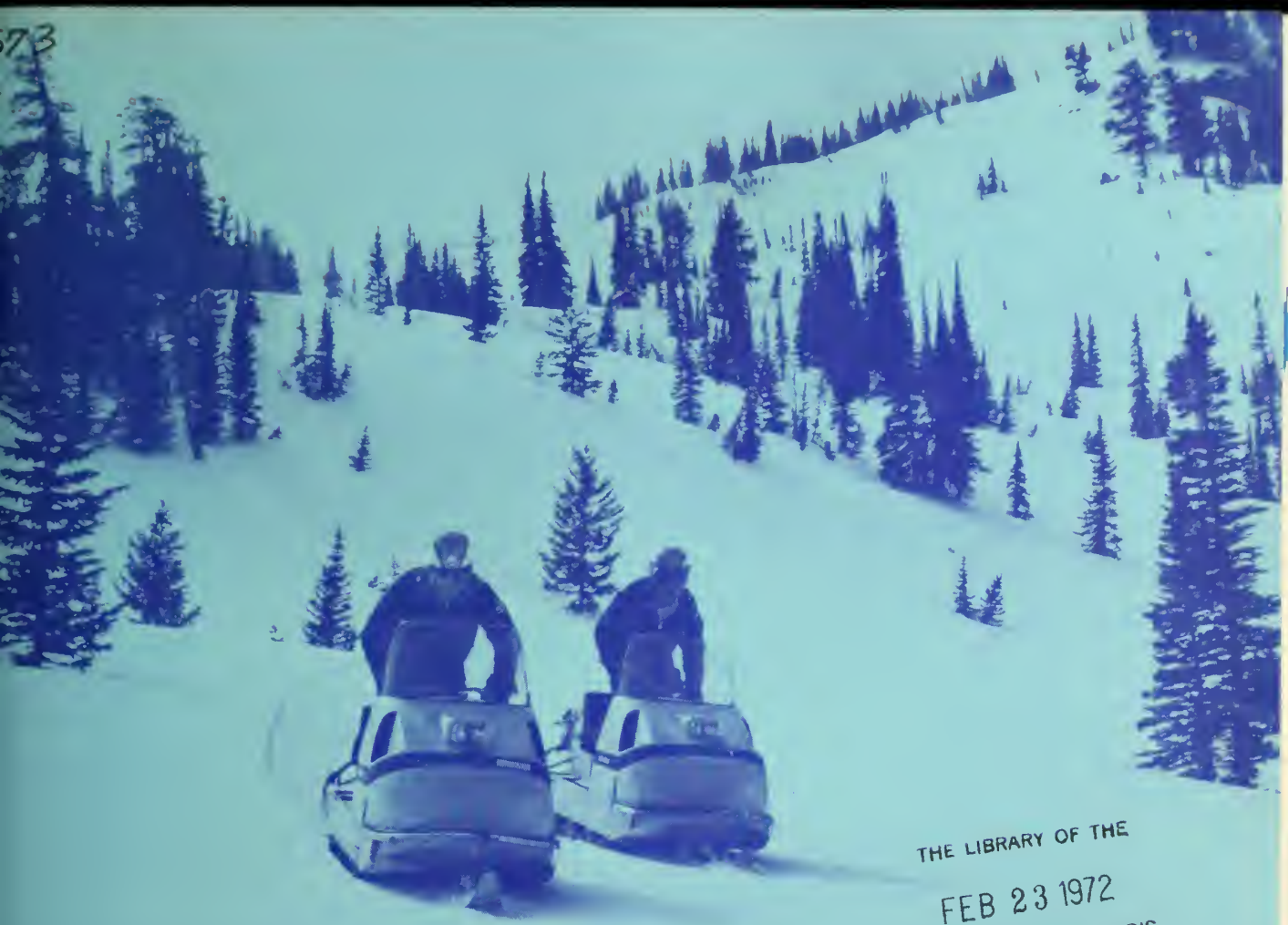
University Camp	12/30	22	5.1	7.1	7.8	10.9
Upper San Juan	12/30	76	20.7	13.6	15.2	19.4
Vail Pass	12/28	36	7.9	5.6	9.3	10.0
Wolf Creek Pass	12/30	69	18.7	13.1	14.2	17.8
Wolf Creek Summit	12/30	79	23.3	13.8	14.7	17.7

Only a few snow courses are read January 1st. From this limited information the Colorado snow pack looks relatively good, especially in the southwestern portion of the state. Some snow courses in this area have February 1st snow packs already. The one area that seems to be slightly deficient is the South Platte Drainage and it's northern tributaries. The snow pack in this area is slightly below normal especially at the lower elevations.

Mountain soils contain about normal amounts of moisture.

Carry-over storage in Colorado's numerous reservoirs is excellent in all areas except the Rio Grande Drainage. Here storage is slightly deficient.

c



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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by
U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
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AS OF
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COVER PHOTO NUMBER ORC 221-3

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Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK
STATE CONSERVATIONIST
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ALBUQUERQUE, NEW MEXICO

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Report prepared by

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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

February 1, 1972

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries

WATER SUPPLY CONDITIONS

as of

February 1, 1972

ONLY ABOUT HALF OF THE SNOW SEASON HAS PASSED AS OF FEBRUARY FIRST. MOST OF THE TWO STATE AREA HAS NEAR TO SLIGHTLY ABOVE NORMAL SNOW PACK. HIGHEST AREAS OF SNOW ARE IN NORTHERN NEW MEXICO AND SOUTHERN COLORADO, PARTICULARLY THE RIO GRANDE AND SAN JUAN BASINS. EXTREMELY HIGH WINDS IN NORTHERN COLORADO HAVE BLOWN SOME SLOPES COMPLETELY CLEAN WHILE DEPOSITING LARGE AMOUNTS IN OTHER AREAS. THE EFFECTS OF THIS WIND WILL BE EXAMINED. CARRY-OVER RESERVOIR STORAGE IS GOOD IN NORTHERN COLORADO. POOR STORAGE EXISTS ON THE ARKANSAS IN COLORADO AND RIO GRANDE IN NEW MEXICO.

COLORADO

-- THE SNOW PACK RANGES FROM 128% OF THE 15 YEAR AVERAGE ON THE SAN JUAN TO 111% ON THE SOUTH PLATTE BASIN. 150 MPH WINDS HAVE BEEN RECORDED IN THIS AREA. THE EFFECT OF THESE WINDS WILL BE EVALUATED PRIOR TO FORECAST. CARRY-OVER STORAGE ON THE SOUTH PLATT IS EXCELLENT. THE BIG THOMPSON PROJECT HAS 129% OF AVERAGE STORAGE AND WILL PROVIDE AN EXCELLENT SUPPLEMENTAL WATER SUPPLY THIS SUMMER. ALL OTHER BASINS HA LESS THAN NORMAL STORAGE. MOUNTAIN SOILS CONTAIN NEAR NORMAL AMOUNTS OF MOISTUR VALLEY SOILS ARE REPORTED TO BE IN FAIR TO GOOD CONDITION.

NEW MEXICO

-- ALL OF NORTHERN NEW MEXICO HAS A GOOD SNOW PACK, ALTHOUGH JANUARY WAS A DRY MONTH. EARLY SNOW FALL WA MUCH ABOVE NORMAL. SNOW ON THE RIO GRANDE IS ABOUT 111% OF NORMA ON THE CHAMA ABOUT 102% AND ON THE SAN JUAN 124%. THE PECOS HAS CONSIDERABLY BETTER SNOW THAN LAST YEAR, BUT ONLY ABOUT 102% OF AVERAGE. ELEPHANT BUTTE RESERVOIR CONTAINS 225,000 A.F. WHICH IS ABOUT 60% OF NORMAL. CONCHAS RESERVOI CONTAINS 79,000 A.F. OR ABOUT 50% OF NORMAL. MOUNTAIN SOILS CONTAIN ABOUT AVERA MOISTURE.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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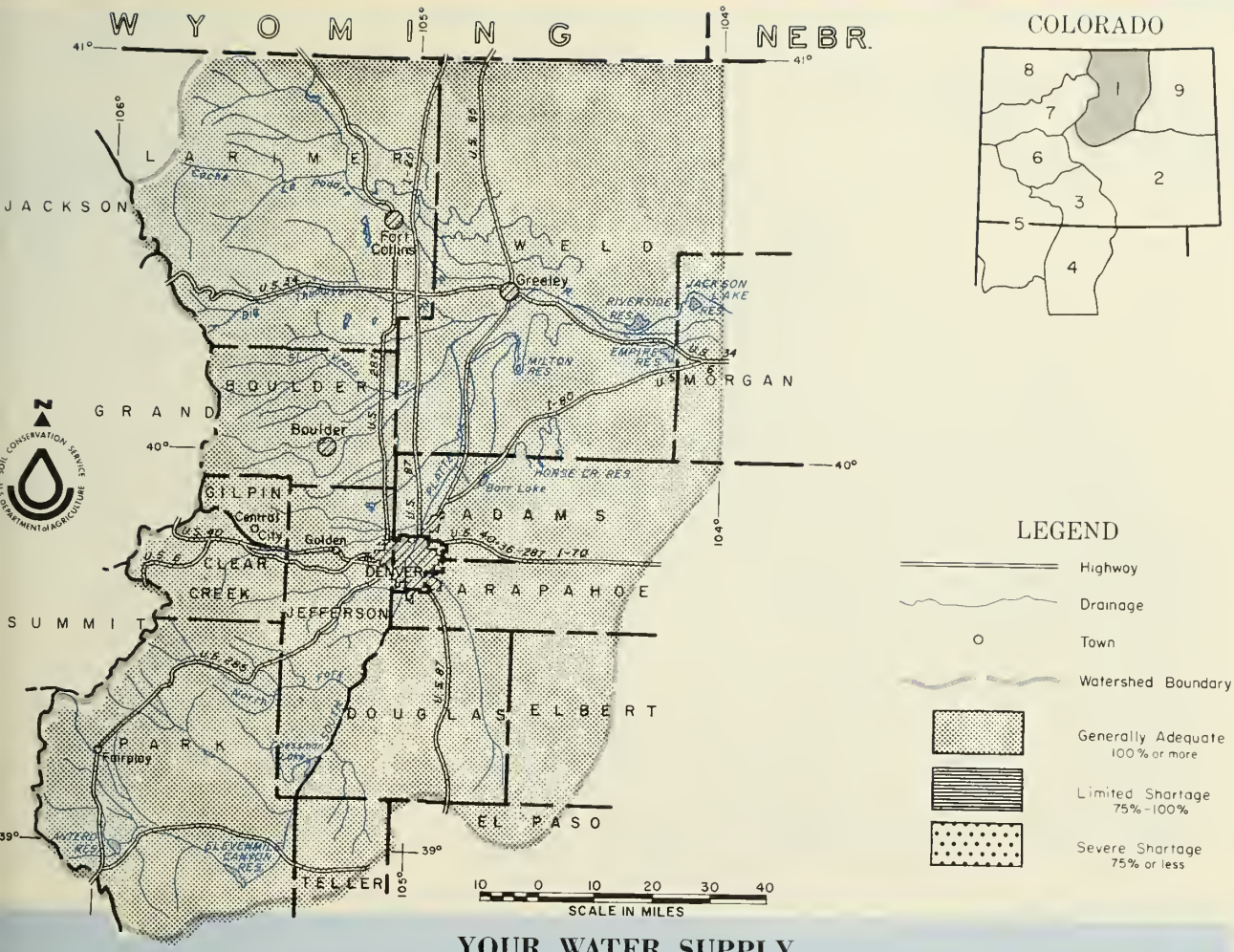

YOUR WATER SUPPLY

THE SNOW PACK OVER THE SOUTH PLATTE IS SPOTTY. SOME AREAS ARE REPORTING VERY GOOD SNOW WHILE OTHERS ARE DEFICIENT. HIGH WINDS MAY HAVE CAUSED DRASTIC CHANGES IN THE SNOW PACK. GENERALLY THE SNOW PACK IS GOOD. CARRY-OVER STORAGE IS 137% OF NORMAL. SOIL MOISTURE IS NEAR NORMAL IN THE MOUNTAIN AREA AND GENERALLY GOOD IN THE PLAINS AREAS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
Deer Creek	Avg.	Avg.
North Fork of So. Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek		
Rock Creek		

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow m diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	4	86	122
Boulder	3	106	109
Cache La Poudre	8	73	125
Clear Creek	6	85	86
Saint Vrain	2	171	168
South Platte	3	131	111

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	97	110
Boulder	1	73	95
Cache La Poudre	2	92	91
Clear Creek	2	69	79
Saint Vrain	2	89	117
South Platte	2	98	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	21.0	25.9	17.6
Black Hollow	8.0	4.2	4.3	3.3
Boyd Lake	44.0	35.9	44.0	27.6
Cache La Poudre	9.5	7.8	7.8	6.6
Carter Lake	108.9	88.2	93.6	61.9
Chambers Lake	8.8	1.3	3.9	2.3
Cheesman	79.0	79.1	74.2	45.6
Cobb Lake	34.3	20.4	22.1	9.9
Eleven Mile	97.8	76.2	96.4	72.0
Fossil Creek	11.6	8.8	9.1	5.4
Gross	43.1	28.2	35.0	24.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average
Halligan	6.4	5.0	0.3	3.1
Horsetooth	143.5	90.6	99.1	81.2
Lake Loveland	14.3	11.4	10.0	7.9
Lone Tree	9.2	8.2	8.0	6.0
Mariano	5.4	5.3	5.1	3.7
Marshall	10.3	5.4	5.6	2.1
Marston	18.0	15.6	16.6	14.1
Milton	24.4	16.0	14.0	9.0
Standley	18.5	30.1	30.4	7.9
Terry Lake	42.0	5.7	6.3	4.6
Union	12.7	12.1	12.7	7.8
Windsor	18.6	18.6	4.7	7.6

† 1953-1967 Ave

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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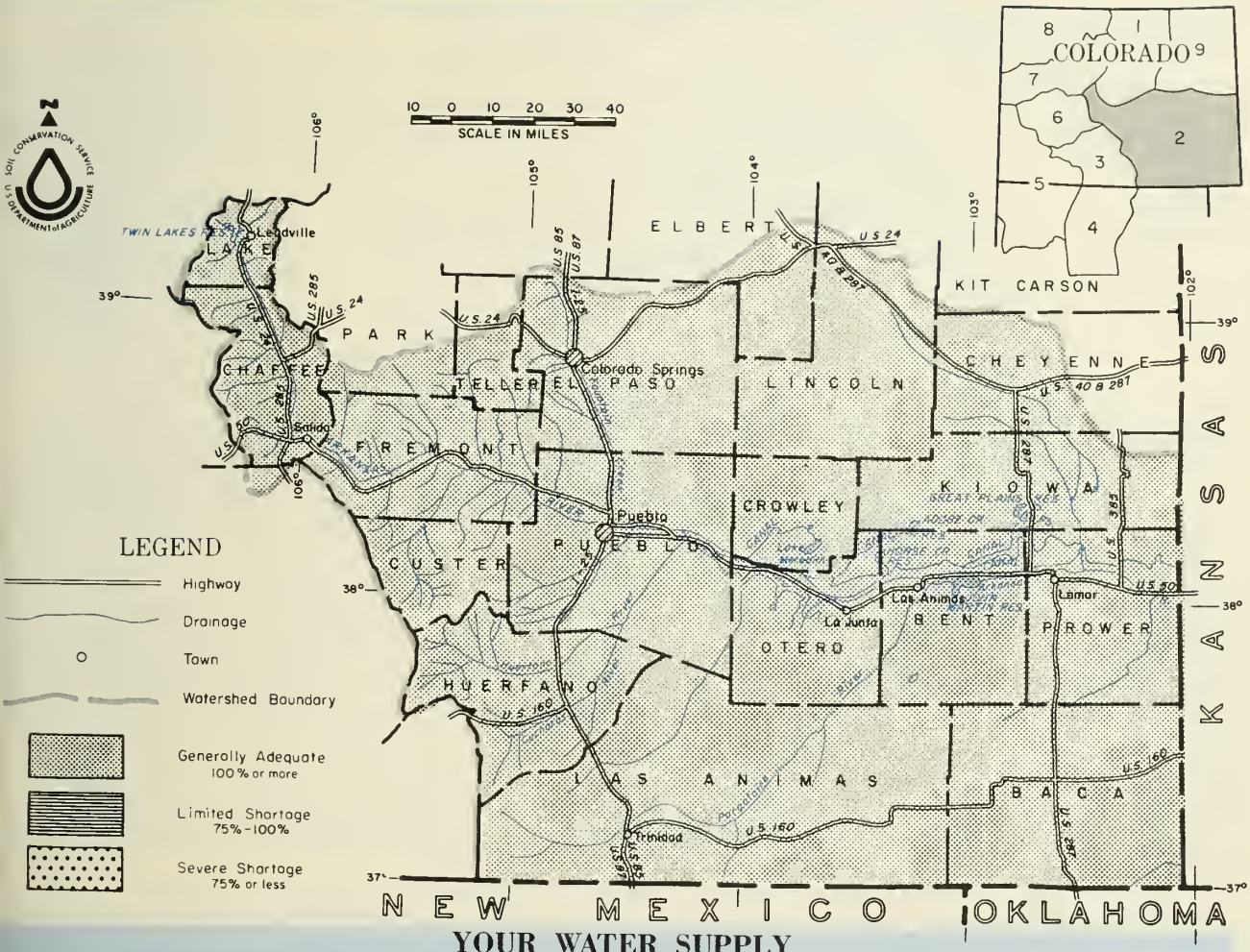

YOUR WATER SUPPLY

MOUNTAIN SNOW PACK ON THE ARKANSAS IS NEAR NORMAL AND SLIGHTLY BETTER THAN LAST YEAR. THE SOUTHERN TRIBUTARIES HAVE A MUCH BETTER SNOW PACK THAN LAST YEAR. CONSIDERABLY MORE SNOW IS NEEDED TO ASSURE ADEQUATE WINTER SUPPLIES. CARRY-OVER STORAGE IS ONLY ABOUT ONE HALF OF NORMAL. STORAGE IN TURQUOISE IS 58,500 A.F. SOIL MOISTURE IN MOUNTAINS IS BELOW NORMAL.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape Creek	Avg.	Fair
Hardscrabble Creek	Avg.	Fair
Huerfano	Avg.	Fair
Monument Creek	Avg.	Fair

(1) Observed flou plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestak Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	9	111	115
Cucharas and Purgatorie	1	163	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	90	82
Cucharas and Purgatorie	1	76	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe Creek	61.6	14.4	33.1	11.5
Clear Creek	11.4	5.4	3.7	6.6
Cucharas	40.0	- -	- -	6.9
Great Plains	150.0	35.8	110.4	26.9
Horse Creek	26.9	0.0	3.4	4.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	18.3	14.6	81.5
Meredith	41.9	3.2	26.0	5.7
Model	15.0	0.9	1.8	2.6
Turquoise	130.0	58.5	46.4	6.9
Twin Lakes	57.9	30.4	42.2	19.7

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of
February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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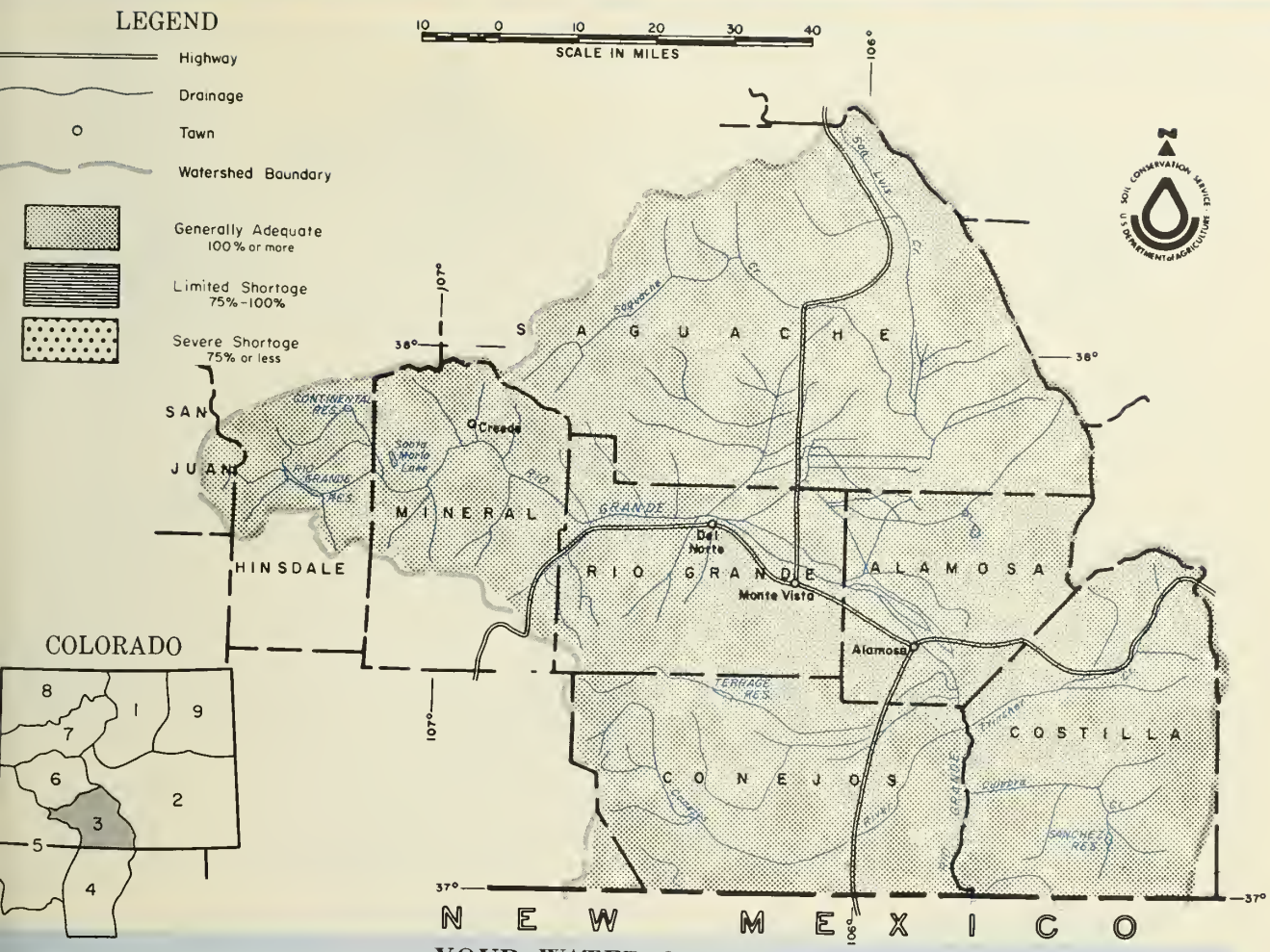

YOUR WATER SUPPLY

SNOWFALL WAS BELOW NORMAL DURING JANUARY BUT THE SNOW PACK STILL REMAINS ABOVE AVERAGE ON ALL DRAINAGES IN THE RIO GRANDE EXCEPT THE CONEJOS, WHICH IS SLIGHTLY BELOW AVERAGE. THE MAIN STEM OF THE RIO GRANDE HAS 132% OF AVERAGE SNOW. THE RESERVOIR STORAGE IS MUCH BELOW LAST YEAR BUT SLIGHTLY ABOVE THE AVERAGE. SOIL MOISTURE IN THE MOUNTAIN AREAS IS BELOW AVERAGE.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Creek	Avg.	Fair
Trinchera Creek	Avg.	Fair

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change storage in Santa Maria, Rio Grande and Cantinental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	127	127
Conejos	4	123	97
Culebra	2	171	133
Rio Grande	10	171	132

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	62	79
Conejos	1	102	91
Culebra	2	81	95
Rio Grande	2	71	92

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	26.7	6.1	7.9	3.8
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	14.7	39.2	10.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average
Sanchez	103.2	9.5	16.9	10.6
Santa Maria	45.0	6.8	9.8	5.3
Terrace	17.7	5.0	0.0	3.5

† 1953-1967 perio

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

February 1, 1972

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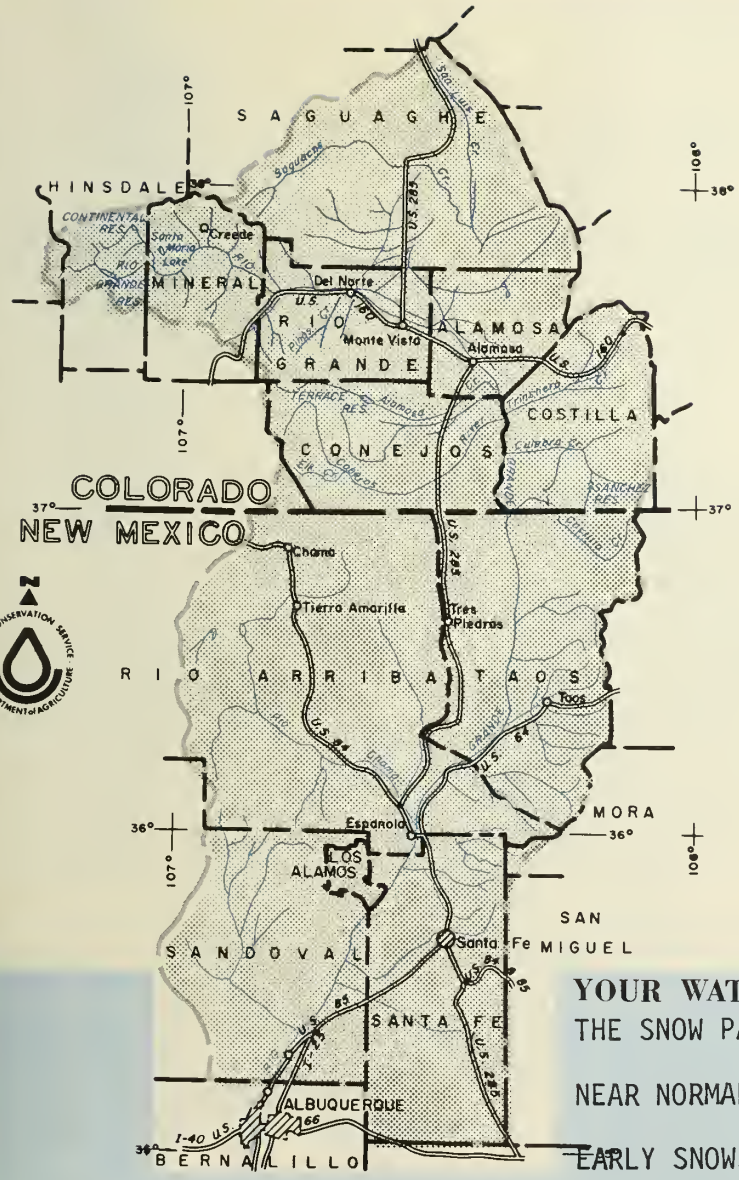

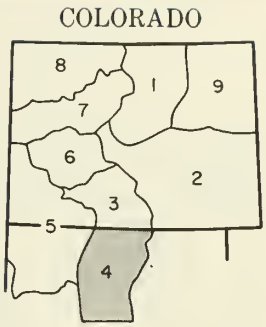

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

THE SNOW PACK IN NORTHERN NEW MEXICO IS NEAR NORMAL AND FAR BETTER THAN LAST YEAR. EARLY SNOWS WERE EXCELLENT, HOWEVER, JANUARY SNOW FALL WAS DEFICIENT. SOIL MOISTURE IN THE MOUNTAINS IS CONSIDERABLY ABOVE NORMAL ON THE CHAMA AND RIO GRANDE, BUT DEFICIENT ON RED RIVER AND PECOS. CARRY-OVER RESERVOIR STORAGE IS ONLY 56% OF NORMAL.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo	Avg.	Fair
Jemez River	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Avg.	Fair
Santa Fe Creek	Avg.	Fair

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	270	104
Rio Chama	4	133	102
Rio Grande, N.M.	11	296	111
Rio Hondo	1	225	- -
Red River	2	357	105

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	108	91
Rio Chama	2	287	176
Rio Grande	4	98	119
Red River	1	113	82

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	46	50	73
Caballo	344	17	30	47
Conchas	273	79	154	163

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Elephant Butte	2195	225	369	374
Elvado	195	1	1	4
McMillan-Avalon	38	13	22	19

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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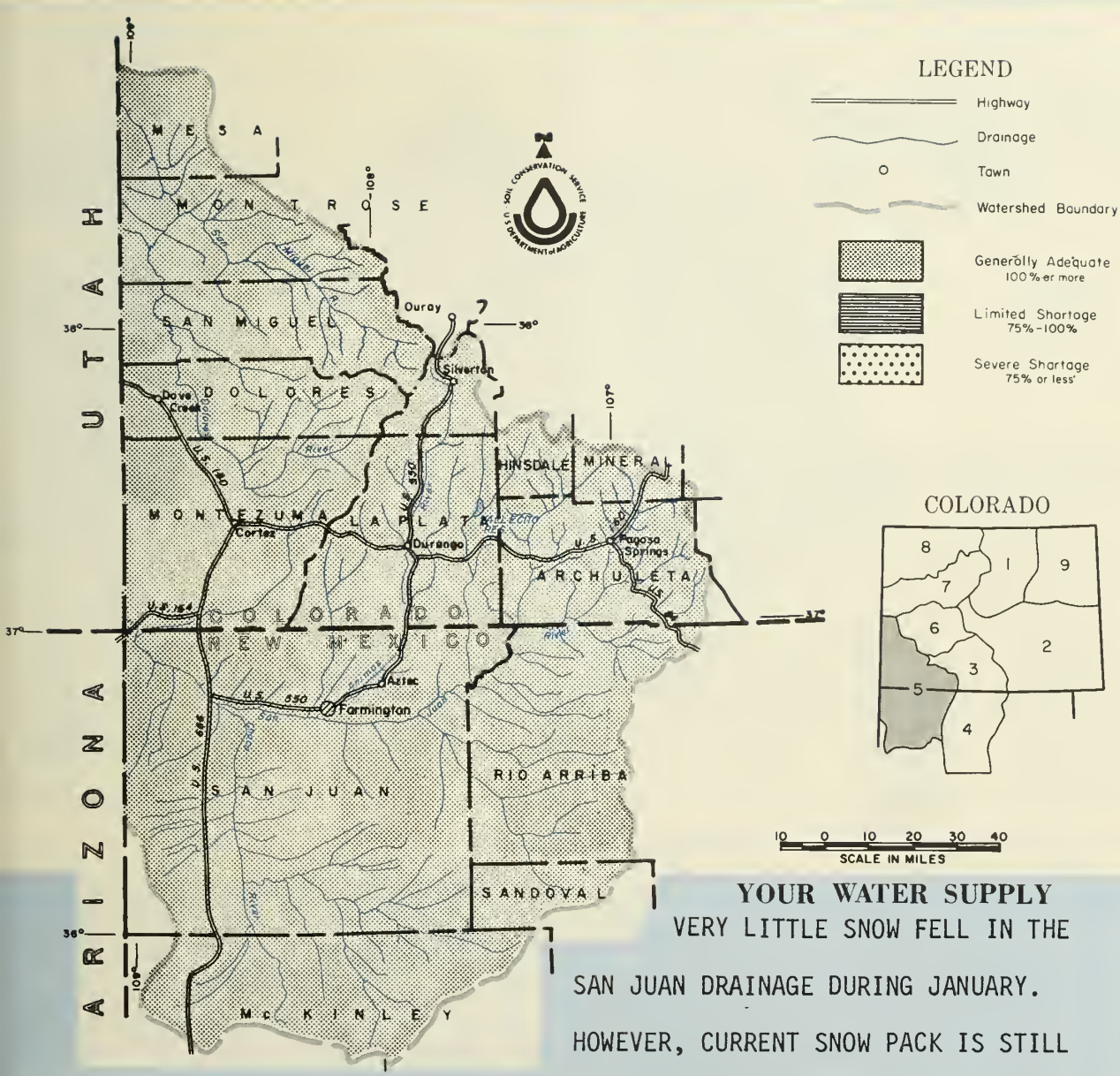

YOUR WATER SUPPLY

VERY LITTLE SNOW FELL IN THE SAN JUAN DRAINAGE DURING JANUARY. HOWEVER, CURRENT SNOW PACK IS STILL ABOVE NORMAL. ANIMAS HAS 132%, DOLORES 125% AND SAN JUAN MAIN STEM IS 124% OF THE 1953-67 AVERAGE. SOIL MOISTURE IS NEAR NORMAL. CARRY-OVER STORAGE IS EXCELLENT AND WILL PROVIDE GOOD SUPPLEMENTAL SUPPLIES NEXT SUMMER.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Exc.
Mancos	Exc.	Exc.
San Miguel	Exc	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	8	135	132
Dolores	5	110	125
San Juan	5	138	124

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	90	97
Dolores	3	98	92
San Juan	2	100	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	9	14	7
Lemon	40	19	26	14
Navajo	1696	929	938	542
Vallecito	126	50	73	46

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO
as of

February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOW PACK IN THE GUNNISON DRAINAGE IS ABOVE NORMAL FOR FEBRUARY FIRST. SNOW ON THE GUNNISON MAIN STEM IS 122% OF NORMAL. WHILE THE TRIBUTARIES, SURFACE CREEK AND THE UNCOMPAHGRE RIVER HAVE ABOUT 125% OF NORMAL. SOIL MOISTURE IS SLIGHTLY ABOVE AVERAGE. CARRY-OVER STORAGE IS LESS THAN LAST YEAR, BUT IS STILL NEAR AVERAGE.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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GLENWOOD SPRINGS, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Exc.
Taylor	Exc.	Exc.

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHEO	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	109	122
Surface Creek	3	100	128
Uncompahgre	3	100	121

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	91	111
Surface Creek	1	89	106
Uncompahgre	1	89	106

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	370	543	- -
Morrow Point	121	116	116	- -
Taylor	106	67	104	54

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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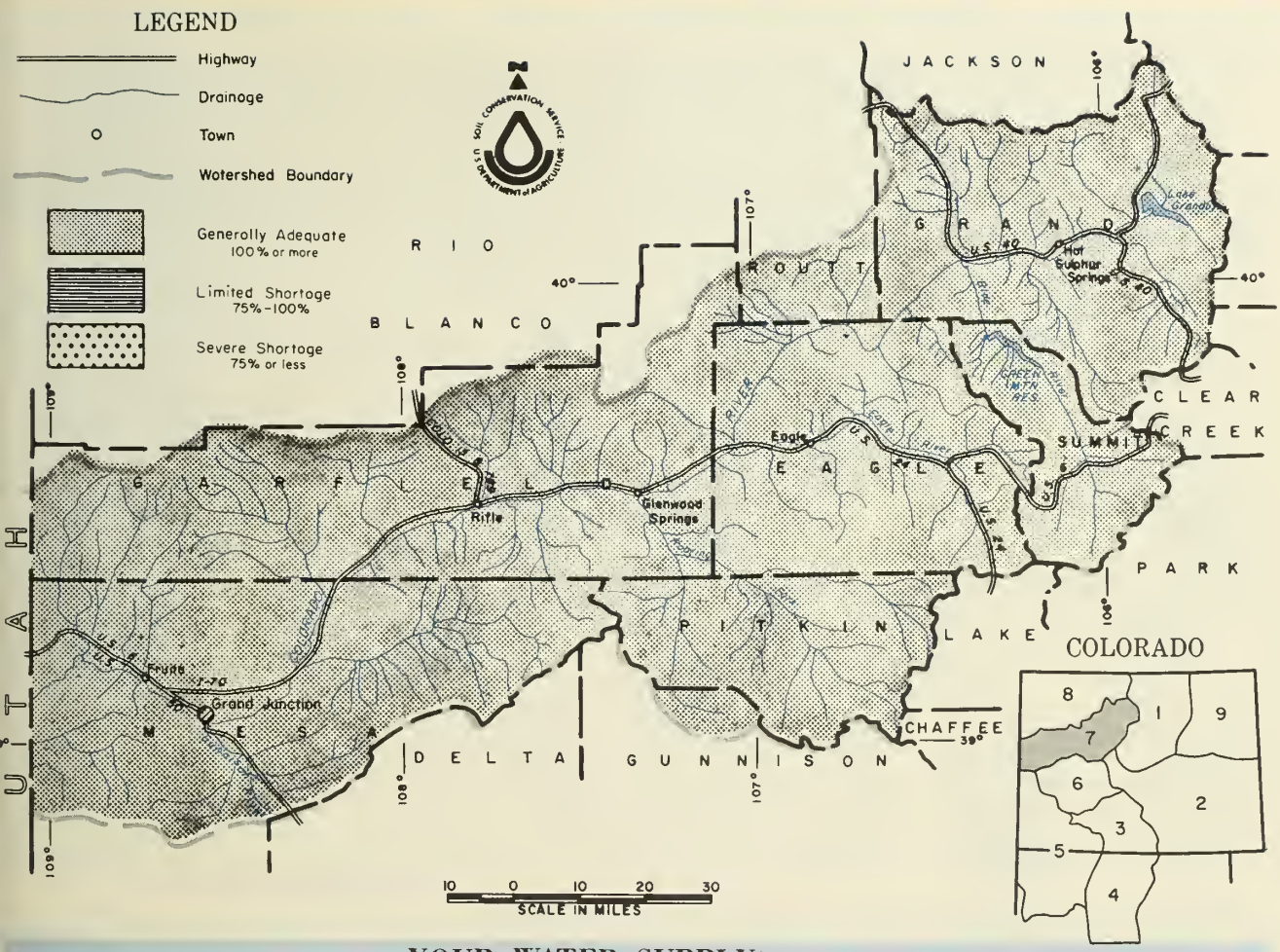
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO

as of

February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK IN THE COLORADO BASIN IS ABOVE NORMAL, BUT GENERALLY BELOW LAST YEAR AT THIS TIME. THE NORTHERN TRIBUTARIES, THE WILLOW AND WILLIAMS FORK RIVERS HAVE CONSIDERABLY ABOVE NORMAL SNOW. CARRY-OVER STORAGE IS SLIGHTLY LESS THAN LAST YEAR, BUT CONSIDERABLY ABOVE NORMAL. SOIL MOISTURE IN THE MOUNTAIN AREAS IS LESS THAN NORMAL.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush Creek	Exc.	Fair
Eagle River	Exc.	Fair
Gypsum Creek	Exc.	Fair

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granb as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Ditc and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus char in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	91	113
Colorado	18	82	118
Plateau	3	96	116
Roaring Fork	10	108	126
Williams Fork	3	82	136
Willow	2	92	133

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	79	96
Colorado	5	85	92
Roaring Fork	1	83	112
Willow	1	103	124

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	236	246	236
Granby	466	365	380	254
Green Mountain	147	89	91	73
Homestake	43	13	24	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	74	79	--
Williams Fork	97	59	54	33
Willow Creek	9	7	7	--
Vega	32	14	17	11

+ 1953-1967 period.

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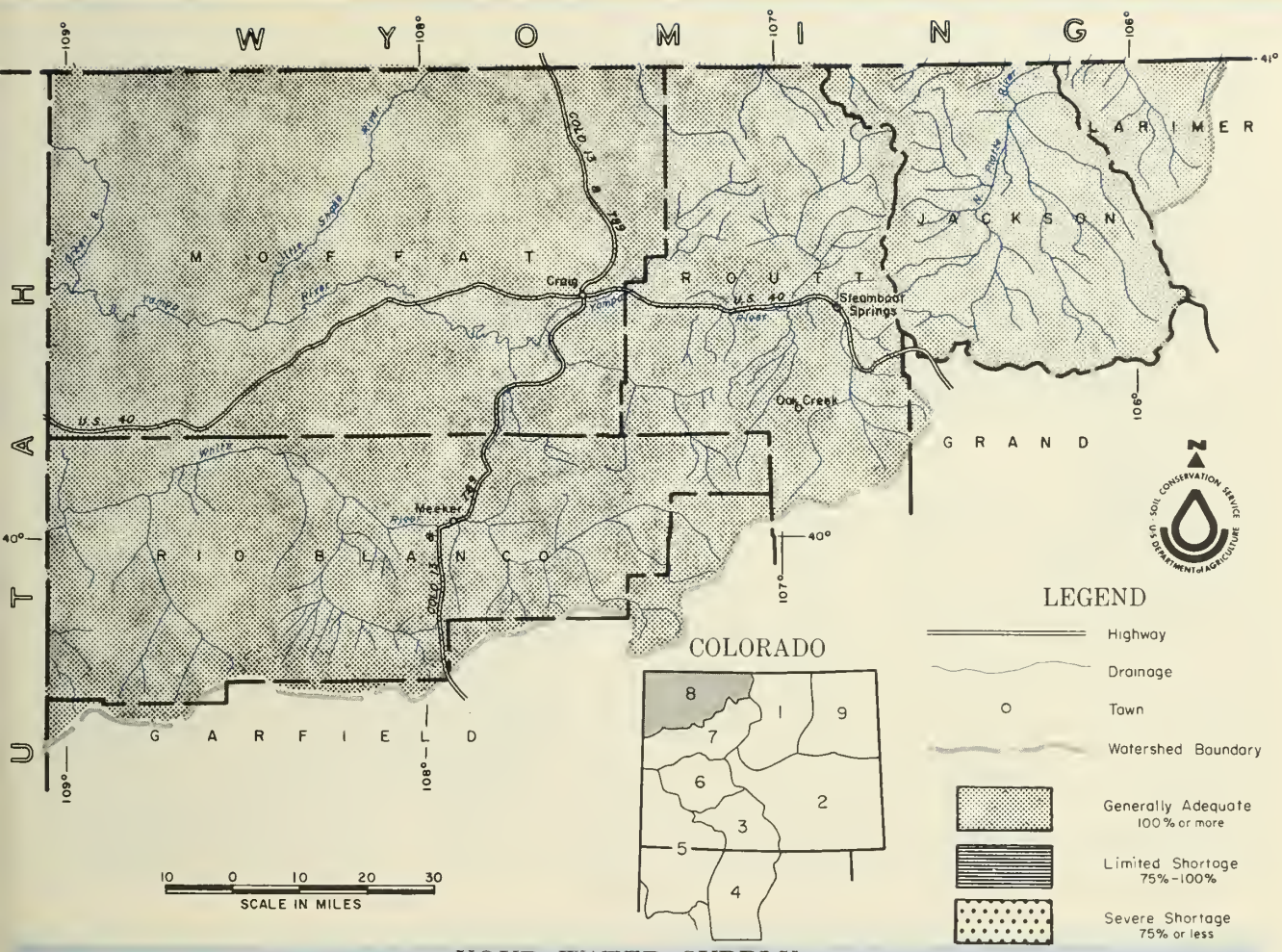
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

ALTHOUGH THE SNOW PACK IN NORTHWESTERN COLORADO IS LESS THAN LAST YEAR IT IS STILL BETTER THAN NORMAL. THE NORTH PLATTE HAS THE BEST SNOW PACK WITH 138% OF NORMAL. SOIL MOISTURE IN THE MOUNTAIN AREAS IS NEAR NORMAL. THE AREA HAS BEEN SUBJECTED TO CONSIDERABLE WIND DURING JANUARY. CONSIDERABLE SNOW WAS MOVED AROUND.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Avg.
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Avg.
Trout Creek	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	2	101	102
Laramie	2	73	115
North Platte	5	84	138
White	2	84	112
Yampa	3	83	117

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	92	91
North Platte	2	106	115
Yampa	1	89	96

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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YOUR WATER SUPPLY

GENERALLY THE SNOW PACK OVER THE SOUTH PLATTE IS NEAR NORMAL. SOME FEW SELECTED SNOW COURSES ARE FAR ABOVE NORMAL OR MUCH BELOW. HIGH WINDS DURING JANUARY MAY BE RESPONSIBLE FOR THESE ODD READINGS. CARRY-OVER STORAGE IS 122% OF NORMAL, BUT SLIGHTLY POORER THAN LAST YEAR. MOUNTAIN SOIL MOISTURE IS NEAR NORMAL. VALLEY SOILS ARE IN GOOD CONDITION.

This report prepared by

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1972			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg.	Avg.
South Platte from Ft. Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Big Thompson	4	86	122
Boulder	3	106	109
Cache La Poudre	8	73	125
Clear Creek	6	85	86
Saint Vrain	2	171	168
South Platte	3	131	111

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Big Thompson	3	97	110
Boulder	1	73	95
Cache La Poudre	2	92	91
Clear Creek	2	69	79
Saint Vrain	2	89	117
South Platte	2	98	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average +
Carter	108.9	88.2	93.6	61.9
Cheesman	79.0	79.1	74.2	45.6
Eleven Mile	97.8	76.2	96.4	72.0
Empire	37.7	19.4	26.6	22.3
Horsetooth	143.5	90.6	99.1	81.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Usable Storage: Last Year	Usable Storage: Average +
Jackson	35.4	15.5	29.7	27.4
Julesburg	28.2	19.8	19.8	20.0
Point of Rocks	70.0	70.0	67.0	43.2
Prewitt	32.8	22.0	21.4	11.4
Riverside	57.5	40.9	47.0	38.7

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1972

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53-67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/1	38	10.2	14.5	8.7
McIntyre	NS			- -	- -
Roach	1/26	43	11.1	14.5	9.8
North Platte River					
Cameron Pass	1/31	56	21.2	27.6	12.9
Columbine Lodge	1/31	62	18.3	18.7	13.6
Northgate	1/31	13	2.6	4.9	3.6
Park View	1/28	28	6.8	7.8	5.2
Willow Cr. Pass(B)	1/28	33	9.4	10.8	7.1
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/28	18	3.7	4.4	5.2
Boulder Falls	1/29	35	9.0	7.3	6.6
University Camp	1/29	45	12.1	11.6	10.9
Big Thompson River					
Deer Ridge	1/31	12	2.4	4.1	2.6
Hidden Valley	NS			8.2	5.9
Lake Irene (B)	1/26	49	13.5	18.1	13.0
Long's Peak	1/28	33	7.7	7.6	5.6
Two Mile	1/30	45	12.0	11.8	7.9
Cache La Poudre					
Bennett Creek	1/28	23	5.2	6.5	- -
Big South	1/31	2	0.3	0.6	1.6
Cameron Pass	1/31	56	21.2	27.6	12.9
Chambers Lake	1/31	21	4.6	6.4	5.2
Deadman Hill	2/1	38	[illegible]	14.5	8.7
Hour Glass Lake	1/28	20	4.3	5.6	3.1
Joe Wright	1/31	50	15.5	18.5	- -
Lost Lake	1/31	32	9.1	10.2	7.2
Pine Creek	1/27	6	0.5	1.5	1.2
Red Feather	1/27	21	4.5	6.3	3.8
Clear Creek					
Baltimore (B)	1/28	18	3.6	4.4	5.2
Berthoud Falls	1/28	36	7.8	10.4	8.0
Empire	1/28	17	3.8	4.6	4.3
Grizzly Peak (B)	1/31	42	10.5	14.2	9.8
Loveland Lift	2/1	26	6.1	6.5	12.9
Loveland Pass	2/1	36	8.9	9.0	8.5
Saint Vrain River					
Copeland Lake	1/29	18	4.7	2.0	2.6
Ward	1/28	18	4.2	3.9	3.4
Wild Basin	NS				6.9
South Platte River					
Como	1/27	25	5.4	3.1	- -
Geneva Park	1/31	16	3.0	1.1	2.7
Horseshoe Mt.	1/26	38	8.9	5.7	- -
Hoosier Pass	1/28	38	9.3	7.1	7.6
Jefferson Creek	1/27	27	5.[illegible]	5.3	5.7
Mosquito	1/27	35	8.5	4.7	- -
Trout Creek Pass	1/26	22	5.0	1.6	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/28	12	1.8	6.5	- -
Cooper Hill (B)	1/28	34	7.3	7.7	- -
East Fork	1/28	28	6.5	6.4	5.6
Four Mile Park	1/31	23	4.2	3.2	3.5
Fremont Pass	1/28	42	10.4	10.8	9.5
Garfield	1/31	35	10.[illegible]	7.2	8.4
Hem[illegible] Lake	1/31	24	6.4	5.8	- -
Monarch Pass	1/[illegible]	39	[illegible]	9.7	10.3
Tennessee Pass	1/31	43	[illegible]	5.8	[illegible]
Twin Lakes Tunnel	1/[illegible]	26	5.5	5.[illegible]	6.[illegible]
Westcliffe	[illegible]	23	5.9	4.3	[illegible]

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53-67
Cucharas River					
Blue Lakes	1/28	0	0.0	0.0	2.3
Cucharas Pass	1/28	13	3.6	5.7	- -
LaVeta Pass (B)	1/28	26	7.5	4.6	6.2
Purgatorie River					
Bourbon	1/31	22	5.0	5.2	- -
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/26	16	2.8	3.2	3.9
Summitville	1/28	54	16.9	12.3	11.6
Conejos River					
Cumbres	1/28	37	13.0	11.2	13.2
LaManga	1/28	42	12.3	- -	- -
Platoro	1/31	41	12.5	9.6	12.9
River Springs	1/27	12	2.6	- -	- -
Culebra River					
Brown Cabin	1/29	16	3.7	0.0	- -
Cottonwood (B)	NS				- -
Culebra	1/28	26	8.3	4.7	5.7
LaVeta Pass (B)	1/28	26	7.5	4.6	6.2
Trinchera (B)	1/26	29	7.6	5.4	- -
Rio Grande					
Cochetopa Pass	1/28	22	4.2	3.4	3.4
Grayback	NS				- -
Hiway	1/31	56	19.2	15.1	15.7
Lake Humphrey	1/28	33	7.5	1.8	5.6
Love Lake	1/27	38	10.4	3.3	- -
Pass Creek	1/31	36	10.5	6.9	8.9
Pool Table	1/27	29	6.2	1.0	6.1
Porcupine	1/28	42	11.6	5.0	8.2
Santa Maria	1/27	23	5.4	0.9	3.4
Upper Rio Grande	1/28	36	10.2	3.7	5.4
Wolf Creek Pass	1/31	62	20.9	16.1	17.8
Wolf Cr. Sum. (B)	1/31	71	25.9	17.3	17.7
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	1/27	13	2.7	0.1	2.6
Rio Chama					
Bateman	1/26	27	6.8	6.0	7.0
Capulin Peak	1/28	15	4.1	2.8	3.3
Chama Divide	1/27	9	2.7	1.8	3.3
Chamita	1/27	20	5.4	3.7	5.0
Rio Grande					
Aspen Grove	NS				- -
Big Tesuque	1/28	20	5.1	1.0	3.7
Blue Bird Mesa	1/27	10	2.8	0.7	3.8
Cordova	NS				6.3
Elk Cabin	2/1	12	3.7	0.2	2.9
Fenton Hill	1/28	19	5.5	1.0	3.0
Hopewell	1/26	35	10.3	- -	- -
Pajarito Peak	1/29	4	1.3	0.0	1.3
Payrole	1/29	20	4.8	4.3	5.9
Quemazon	1/28	26	7.0	3.1	6.5
Rio En Medio	1/28	25	7.8	3.8	6.1
Sandoval	1/28	16	5.9	0.8	3.7
Taos Canyon	1/26	8	2.0	0.0	3.4
Tres Ritos	1/31	10	3.2	0.6	3.5
Rio Hondo					
Twinning	1/26	19	5.4	2.4	- -
Red River					
Hematite Park	1/25	14	2.7	0.0	3.4
Red River	1/25	20	5.5	2.3	4.4

NOTE:
[illegible] - No survey
[illegible] - [illegible] damage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1972

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches) Last Year	Past Record: Water Content (Inches) Avg 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/28	31	9.9	5.9	8.0
Lemon	1/31	25	7.8	5.2	- -
Mineral Creek	1/28	36	11.5	10.0	8.9
Molas Lake	1/28	34	10.9	8.3	8.4
Purgatory	1/28	54	18.4	11.0	- -
Red Mountain Pass	1/28	64	23.1	20.7	17.0
Silverton Sub-Sta.	1/28	26	6.9	3.1	4.8
Spud Mountain	1/28	55	20.0	13.1	15.0
Dolores River					
Lizzard Head	1/28	39	12.5	10.9	9.4
Lone Cone	1/31	41	12.8	11.1	- -
Rico	1/28	20	5.8	4.4	5.0
Telluride	1/28	22	5.4	5.5	4.5
Trout Lake	1/28	32	9.4	9.3	7.6
San Juan River					
Chama Divide (B)	1/27	9	2.7	1.8	3.3
Chamita (B)	1/27	20	5.4	3.7	5.0
Upper San Juan	1/31	67	23.3	17.8	19.4
Wolf Cr. Pass (B)	1/31	62	20.9	16.1	17.8
Wolf Cr. Summit	1/31	71	25.9	17.3	17.7
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/27	50	18.2	16.1	11.5
Blue Mesa	NS				- -
Butte	1/31	35	10.4	9.2	- -
Cochetopa Pass (B)	1/28	22	4.2	3.4	3.4
Crested Butte	1/31	36	9.1	9.6	7.5
Keystone	1/31	50	14.9	13.9	12.6
Lake City	1/27	25	7.6	2.9	- -
Mesa Lakes (B)	1/26	40	11.5	12.0	10.3
McClure Pass	1/28	43	14.3	9.9	11.6
Park Cone	1/29	34	7.0	5.9	6.2
Park Reservoir	1/27	56	16.1	17.9	14.1
Porphyry Creek	1/31	37	10.5	9.5	10.1
Tomichi	1/31	35	10.1	8.3	7.5
Surface Creek					
Alexander Lake	1/27	50	18.2	16.1	11.5
Mesa Lakes (B)	1/26	40	11.5	12.0	10.3
Park Reservoir	1/27	56	16.1	17.9	14.1
Uncompahgre River					
Ironton Park	1/28	26	6.7	9.2	7.6
Red Mountain Pass	1/28	64	23.1	20.7	17.0
Telluride (8)	1/28	22	5.4	5.5	4.5
COLORADO BASIN					
Blue River					
Blue River	1/28	26	5.4	4.7	5.1
Fremont Pass	1/28	42	10.4	10.8	9.5
Frisco	1/31	22	4.8	5.2	4.3
Grizzly Peak	1/31	42	10.5	14.2	9.8
Hoosier Pass (B)	1/28	38	9.3	7.1	7.6
Shrine Pass	1/31	44	11.4	13.8	9.6
Snake River	1/31	24	4.6	6.6	4.7
Summit Ranch	1/29	26	5.6	5.6	4.4
Colorado River					
Arrow	1/28	32	9.0	10.3	6.4
Berthoud Pass	1/26	37	9.7	14.0	8.3
Berthoud Summit	1/28	40	10.0	14.8	10.8
Cooper Hill	1/28	34	7.3	7.7	- -
Fiddler Gulch	NS				8.7
Glenmar Ranch	1/29	28	7.0	7.9	4.7
Gore Pass	1/28	30	7.1	8.8	5.9
Grand Lake	1/26	28	5.3	6.4	4.8
Lake Irene	1/26	49	13.5	18.1	13.0
Lapland	1/25	30	7.7	9.9	- -
Lulu	NS				- -
Lynx Pass	1/28	34	8.0	11.0	6.6
McKenzie Gulch	1/28	27	6.2	3.5	3.4
Middle Fork	1/29	28	6.4	8.3	5.4
Milner	1/26	35	8.4	11.8	8.7
North Inlet	1/27	25	5.5	7.2	5.3
Pando	1/28	31	8.1	5.8	5.7
Phantom Valley	1/26	25	5.6	9.1	6.1
Ranch Creek	1/28	28	6.5	8.1	5.1
Tennessee Pass(8)	1/31	43	5.7	5.8	6.2
Vail Pass	1/31	45	11.9	13.9	10.0
Vasquez	1/27	35	8.7	11.6	6.9
Roaring Fork River					
Aspen	1/28	44	12.3	12.3	8.9
Chapman	1/28	48	11.8	10.4	- -
Independence Pass	1/21	42	10.0	9.4	9.5
Ivanhoe	1/29	46	13.0	13.9	9.6
Kiln	1/29	40	9.6	7.0	- -
Last Chance	1/29	36	9.0	7.6	- -
Lift	1/28	42	11.0	12.0	10.3
McClure Pass	1/28	43	14.3	9.9	11.6
Nast	1/29	25	5.3	4.9	3.7
North Lost Trail	1/28	43	13.6	11.2	9.5
Williams Fork River					
Glenmar Ranch	1/29	28	9.6	7.9	4.7
Jones Pass	1/26	33	8.4	13.4	7.8
Middle Fork	1/29	28	6.4	8.3	5.4
Willow Creek					
Granby	1/28	27	6.1	6.0	4.6
Willow Creek Pass	1/28	33	9.4	10.8	7.1
Plateau Creek					
Mesa Lakes	1/26	40	11.5	12.0	10.3
Park Reservoir	1/27	56	16.1	17.9	14.1
Trickle Divide	1/27	58	18.6	18.3	15.3
YAMPA BASIN					
Elk River					
Clark	1/27	29	7.4	5.6	8.3
Elk River	1/27	43	12.4	14.1	11.1
Hahn's Peak	1/27	34	9.3	11.6	- -
White River					
Burro Mountain	1/28	40	11.9	13.9	10.7
Rio Blanco	1/27	38	10.0	12.2	8.9
Yampa River					
Bear River	NS				- -
Columbine Lodge(B)	1/31	62	18.3	18.7	13.6
Dry Lake	2/1	43	13.1	14.1	12.2
Lynx Pass (B)	1/28	34	8.0	11.0	6.6
Rabbit Ears	1/31	58	17.4	20.1	15.9
Yampa View	1/28	35	9.8	16.8	8.8

NOTE:
NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/3/71	11.1	6.8	6.2	6.4
Willow Pass	11/10/71	9.5	8.3	8.1	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	11/1/71	6.9	3.5	4.8	3.7
Big Thompson River					
Beaver Dam	11/2/71	7.1	5.3	5.1	3.8
Guard Station	11/2/71	6.9	3.2	4.1	3.4
Two Mile	11/2/71	9.1	5.5	5.2	5.5
Clear Creek					
Clear Creek	12/20/71	9.5	5.3	8.1	7.1
Hoop Creek	11/10/71	4.9	2.6	3.4	2.9
Cache La Poudre River					
Feather	10/7/71	10.1	4.7	4.5	4.5
Laramie Road	10/1/71	12.4	6.5	7.7	7.8
South Platte River					
Hoosier Pass	11/8/71	7.8	4.4	5.6	4.9
Kenosha Pass	11/8/71	4.4	2.6	2.6	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/12/71	6.7	4.2	4.4	3.9
Leadville	10/6/71	7.8	3.4	3.3	4.2
Twin Lakes Tunnel	10/6/71	4.5	0.9	1.7	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	10/20/71	10.7	5.0	4.9	5.5
Rio Grande					
Bristol View	10/21/71	6.1	3.1	5.0	3.9
LaVeta	10/20/71	11.9	7.1	9.4	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	10/28/71	6.7	4.5	1.9	2.5
Chamita	11/15/71	8.0	4.1	1.2	2.4
Rio Grande					
Aqua Piedra	12/28/71	7.2	6.0	3.7	3.1
Big Tesuque	10/13/71	3.7	0.8	2.1	1.5
Rio En Medio	10/13/71	3.5	0.8	2.1	1.4
Taos Canyon	12/28/71	3.3	2.3	2.2	2.3
Red River					
Red River Summit	12/28/71	4.8	1.8	1.6	2.2

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/2/71	9.1	5.5	5.5	6.3
Mineral Creek	11/1/71	5.7	3.1	3.5	3.7
Molas Lake	11/1/71	9.4	5.5	6.6	4.6
Dolores River					
Dolores	10/28/71	19.6	10.6	8.0	6.7
Lizzard Head	10/28/71	11.8	3.9	4.6	8.3
Rico	10/28/71	13.8	8.5	10.9	9.9
GUNNISON BASIN					
Gunnison River					
King	10/12/71	3.3	2.1	2.3	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/8/71	4.2	2.7	3.4	2.8
Colorado River					
Berthoud Pass	11/10/71	3.9	2.5	3.1	2.8
Gore	11/8/71	4.9	3.3	3.0	2.5
Grand Mesa	11/8/71	12.5	9.9	11.1	9.3
Ranch Creek	11/10/71	8.7	4.7	5.7	6.0
Vail	10/25/71	12.3	4.9	7.0	6.9
Roaring Fork River					
Placita	11/12/71	9.3	5.8	7.0	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/3/71	19.0	11.3	12.7	11.8

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- National Weather Service

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costillo Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SNOW SURVEY UNIT
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
MAR. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western stotes originotes as mountain snowfoll. This snowfall occumulotes during the winter ond spring, severol months before the snow melts ond appeors as streomflow. Since the runoff from precipitotion as snow is deloyed, estimates of snowmelt runoff can be made well in aovonce of its occurrence. Streamflow forecasts published in this report are bosed principally on meosurement of the water equivolent of the mountain snowpock.

Forecosts become more occurote os more of the data offecting runoff ore meosured. All forecasts ossume that climotic foctors during the remainder of the snow occumulotion ond melt season will interuct with a resultont overage effect on runoff. Eorly season forecosts are therefore subject to o greoter change than those mode on loter dates.

The snow course measurement is obtoined by sampling snow depth ond woter equivolent at surveyed ond marked locotions in mountoin areas. A totol of about ten samples ore token ot eoch location. The averoge of these ore reported os snow depth ond water equivolent. These meosurements are repeated in the some locotion neor the same dotes eoch year.

Snow surveys are made monthly or semi-monthly fiom January 1 through June 1 in most stotes. There are obout 1900 snow courses in Western United Stotes ond in the Columbio Basin in British Columbio. Networks of outomotic snow woter equivolent ond related data sensing devices, along with radio telemetry are expanding ond will provide o continuous record of snow woter and other porameters of key locations.

Detailed doto on snow course and soil moisture measurements ore presented in stote ond locol reports. Other data on reservoir storage, summories of precipitotion, current streamflow, and soil moisture conditions at volley elevations ore olso included. The report for Western United States presents a brood picture of woter supply outlook conditions, including selected streomflow forecosts, summory of snow accumulotion to dote, ond storoge in larger reservoirs.

Snow survey ond soil moisture dota for the period of record ore published by the Soil Conservation Service by states about every five yeors. Doto for the current yeor is summorized in o West-wide basic dota summory ond published about October 1 of each yeor.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservotion Service publishes reports following the principol snow survey dotes from Jonuory 1 through June 1 in cooperation with state water odministrotors, ogriculturol experiment stations and others. Copies of the reports for Western United States ond all stote reports moy be obtained from Soil Conservotion Service, Western Regionol Technical Service Center, Room 209, 701 N. W. Glison, Portlond, Oregon 97209.

Copies of stote ond locol reports may olso be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Aloska	P. O. Box "F", Palmer, Alasko 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorodo 80217
Idoho	Room 345, 304 N. 8th. St., Boise, Idoho 83702
Montano	P. O. Box 970, Bozemon, Montona 59715
Nevodo	P. O. Box 4850, Reno Nevodo 89505
Oregon	1218 S. W. Woshington St., Portland, Oregon 97205
Utoh	4012 Federal Bldg., 125 South Stote St., Salt Loke City, Utah 84111
Woshington	360 U.S. Court House, Spokone, Woshington 99201
Wyoming	P. O. Box 2440, Cosper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepored by other agencies include a report for Colifornio by the Water Supply Forecast ond Snow Surveys Unit, Californio Department of Water Resources, P. O. Box 388, Socromento, Californio 95802 --- ond for British Columbia by the Department of Londs, Forests and Woter Resources, Water Resources Service, Parlioment Building, Victoria, British Columbio

USDA-SCS-PORTLAND, OREG 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of March 1, 1972

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

March 1, 1972

SNOWFALL DURING FABRUARY WAS BELOW NORMAL IN ALL AREAS. HOWEVER, MOST OF COLORADO AND NEW MEXICO STILL HAVE NEAR NORMAL SNOWPACK WITH THE EXCEPTION OF THE RIO CHAMA AND SAN JUAN BASINS. THE UPPER COLORADO AND THE SOUTH PLATTE BASINS HAVE THE HIGHEST SNOWPACKS. LOW SNOWFALL AND WARM TEMPERATURES HAVE CAUSED MELTING ON SOUTH FACING SLOPES, ESPECIALLY IN SOUTHERN COLORADO AND NEW MEXICO. RESERVOIR STORAGE IS GOOD IN NORTHERN COLORADO AND POOR ON THE ARKANSAS IN COLORADO AND RIO GRANDE IN NEW MEXICO.

COLORADO

-- FEBRUARY SNOWFALL WAS LESS THAN NORMAL OVER THE ENTIRE STATE AND MUCH LESS THAN NORMAL IN THE SOUTHERN PORTION MOST AREAS STILL SHOW ABOUT NORMAL SNOWPACK, BUT PERCENTAGE-WIS LESS THAN LAST YEAR. STREAMFLOW FORECASTS RANGE FROM 75 TO 110 PERCENT OF THE 1953-67 AVERAGE. RESERVOIR STORAGE IS ABOVE NORMAL IN ALL AREAS EXCEPT THE ARKANSAS DRAINAGE. THERE STORAGE IS ABOUT 71% OF THE 15 YEAR AVERAGE. SOIL MOISTURE CONDITIONS ARE REPORTED AS FAIR IN THE IRRIGATED AREAS OF THE STATE AND MOUNTAIN SOILS CONTAIN NEAR NORMAL MOISTURE. MORE SNOW IS NEEDED.

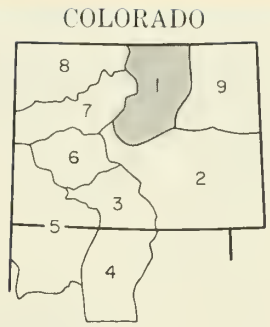
NEW MEXICO

-- WEATHER IN NEW MEXICO DURING FEBRUARY WAS WARM AND DRY. THIS DID NOT IMPROVE THE MOUNTAIN SNOWPACK. ALL STREAMFLOW FORECASTS WERE REDUCED DUE TO THE BELOW NORMAL SNOWPACK. FORECASTS RANGE FROM 85% OF NORMAL ON COSTILLA CREEK TO ABOUT NORMA ON RIO HONDO. THE SAN JUAN INFLOW TO NAVAJO IS ABOUT NORMAL, BUT CONSIDERABLY REDUCED FROM LAST MONTH. FLOW OF THE PECOS SHOULD BE BELOW NORMAL. RESERVOIR CARRY-OVER STORAGE IS POOR, BUT WILL PROVIDE SOME SUPPLEMENTAL SUPPLIES. CONSIDERABLY MORE SNOW IS NEEDED TO INSURE ADEQUATE WATER THIS SUMMER.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

SNOWPACK IS ABOVE AVERAGE ON MOST TRIBUTARIES IN THE SOUTH PLATTE BASIN. THE WATER SUPPLY OUTLOOK DROPPED SLIGHTLY FROM LAST MONTH DUE TO BELOW AVERAGE SNOWFALL IN MOST AREAS. STREAMFLOW FORECASTS FOR THE APRIL THROUGH SEPTEMBER PERIOD RANGE FROM 105% ON THE CACHE LA POUDRE TO 114% ON THE ST. VRAIN. RESERVOIR STORAGE REMAINS THE SAME AS LAST MONTH AT 137% OF NORMAL. THIS IS ABOUT 76% OF THE TOTAL STORAGE CAPACITY.

This report prepared by
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Issued by
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JACK L. HALL---AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (1)	110	110	100
Boulder at Orodell	55	112	49
Cache La Poudre at Canyon Mouth (2)	225	105	215
Clear Cr. at Golden (3)	130	109	119
Saint Vrain at Lyons (4)	80	114	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	91	114
Boulder	3	103	112
Cache La Poudre	8	78	111
Clear Creek	6	78	91
Saint Vrain	3	111	114
South Platte	3	119	110

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	97	110
Boulder	1	73	95
Cache La Poudre	2	92	91
Clear Creek	2	69	79
Saint Vrain	2	89	117
South Platte	2	98	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	24.0	24.0	18.9
Black Hollow	8.0	4.2	4.2	3.3
Boyd Lake	44.0	36.1	44.8	27.8
Cache La Poudre	9.5	7.7	7.9	7.0
Carter Lake	108.9	97.5	100.1	71.3
Chambers Lake	8.8	1.6	4.2	2.7
Cheesman	79.0	79.1	72.6	46.4
Cobb Lake	34.0	20.5	22.1	9.9
Eleven Mile	97.8	73.5	96.4	72.0
Fossil Creek	11.6	8.8	9.1	6.1
Gross	43.1	28.9	36.0	24.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average
Halligan	6.4	5.6	1.5	3.8
Horsetooth	143.5	106.5	106.3	93.6
Lake Loveland	14.3	12.2	10.0	8.1
Lone Tree	9.2	7.9	8.2	6.2
Mariano	5.4	5.3	5.1	3.9
Marshall	10.3	6.1	6.5	2.5
Marston	18.0	14.8	16.9	14.3
Milton	24.4	15.9	14.0	9.5
Standley	42.0	24.3	23.3	9.8
Terry Lake	8.2	5.7	6.4	4.9
Union	12.7	12.1	12.7	7.5
Windsor	18.6	13.5	6.4	8.4

† 1953-1967 Averi

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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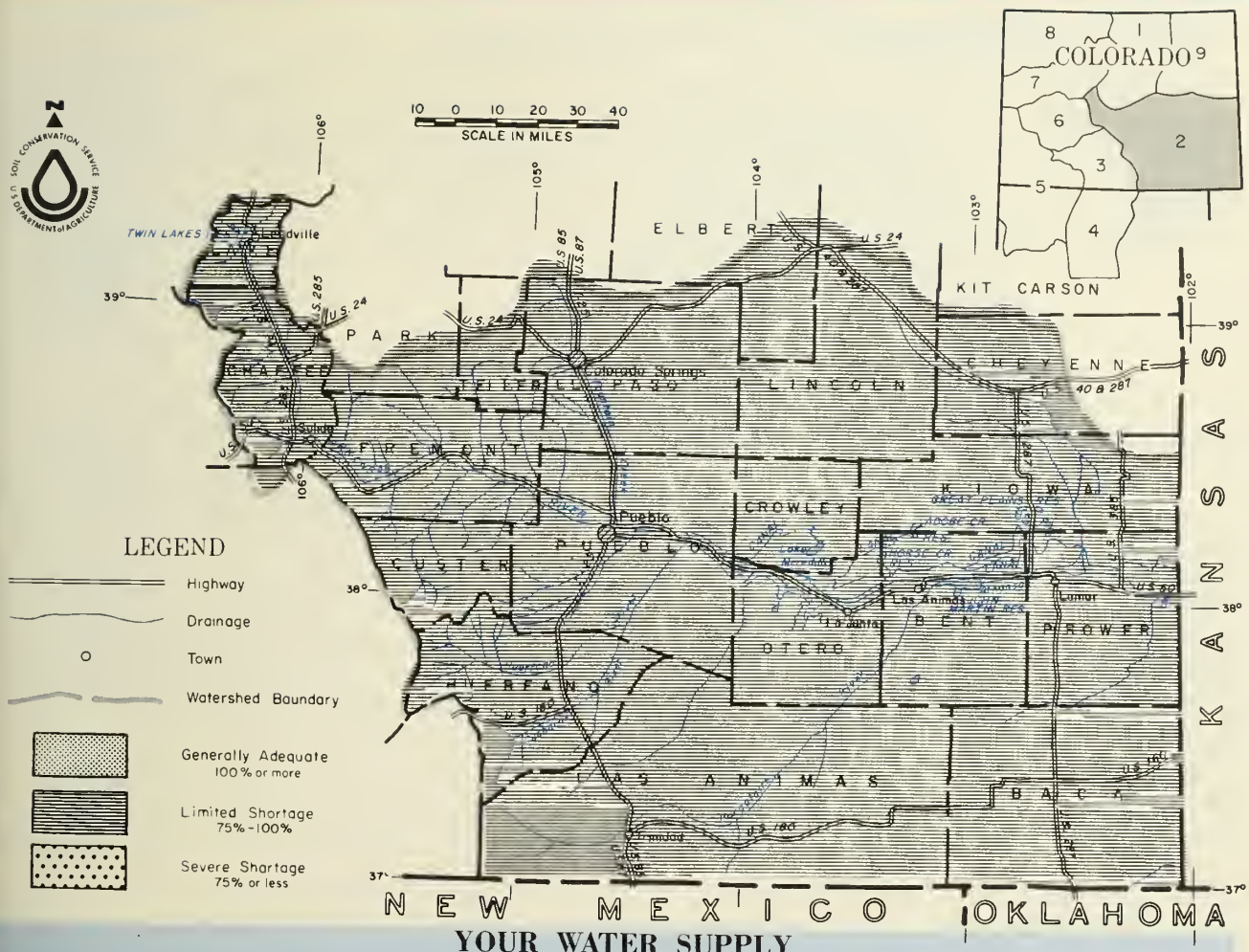

YOUR WATER SUPPLY

THE SNOWPACK DROPPED TO NEAR NORMAL ON THE ARKANSAS RIVER BECAUSE OF BELOW NORMAL SNOWFALL DURING THE MONTH. STREAMFLOW FORECASTS ON THE ARKANSAS ARE 94% AT SALIDA AND 100% AT PUEBLO. THE PURGATOIRE IS FORECAST AT 93% AND THE CUCHARAS SLIGHTLY ABOVE AVERAGE. RESERVOIR STORAGE, EXCLUDING TURQUOISE, IS 71% OF THE 1953-67 AVERAGE AND 48% OF LAST YEAR. SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED AS FAIR TO POOR.

This report prepared by
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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	300	100	298
Arkansas at Salida (1)	290	94	309
Cucharas nr LaVeta	14	117	12
Purgatoire at Trinidad	43	93	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape	Avg.	Fair
Hardscrable Creek	Avg.	Fair
Huerfano	Avg.	Fair
Monument Creek	Avg.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Puss, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	100	103
Cucharas and Purgatoire	2	115	94

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	90	82
Cucharas and Purgatoire	1	76	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	13.5	47.9	11.5
Clear Creek	11.4	6.2	5.4	6.6
Cucharas	40.0	NR		6.9
Great Plains	150.0	42.0	108.7	35.4
Horse Creek	26.9	0.0	4.3	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	22.6	26.5	85.1
Meredith	41.9	8.5	26.0	9.0
Model	15.0	1.0	1.9	3.1
Turquoise	130.0	58.7	50.0	7.0
Twin Lakes	57.9	30.8	41.8	20.1

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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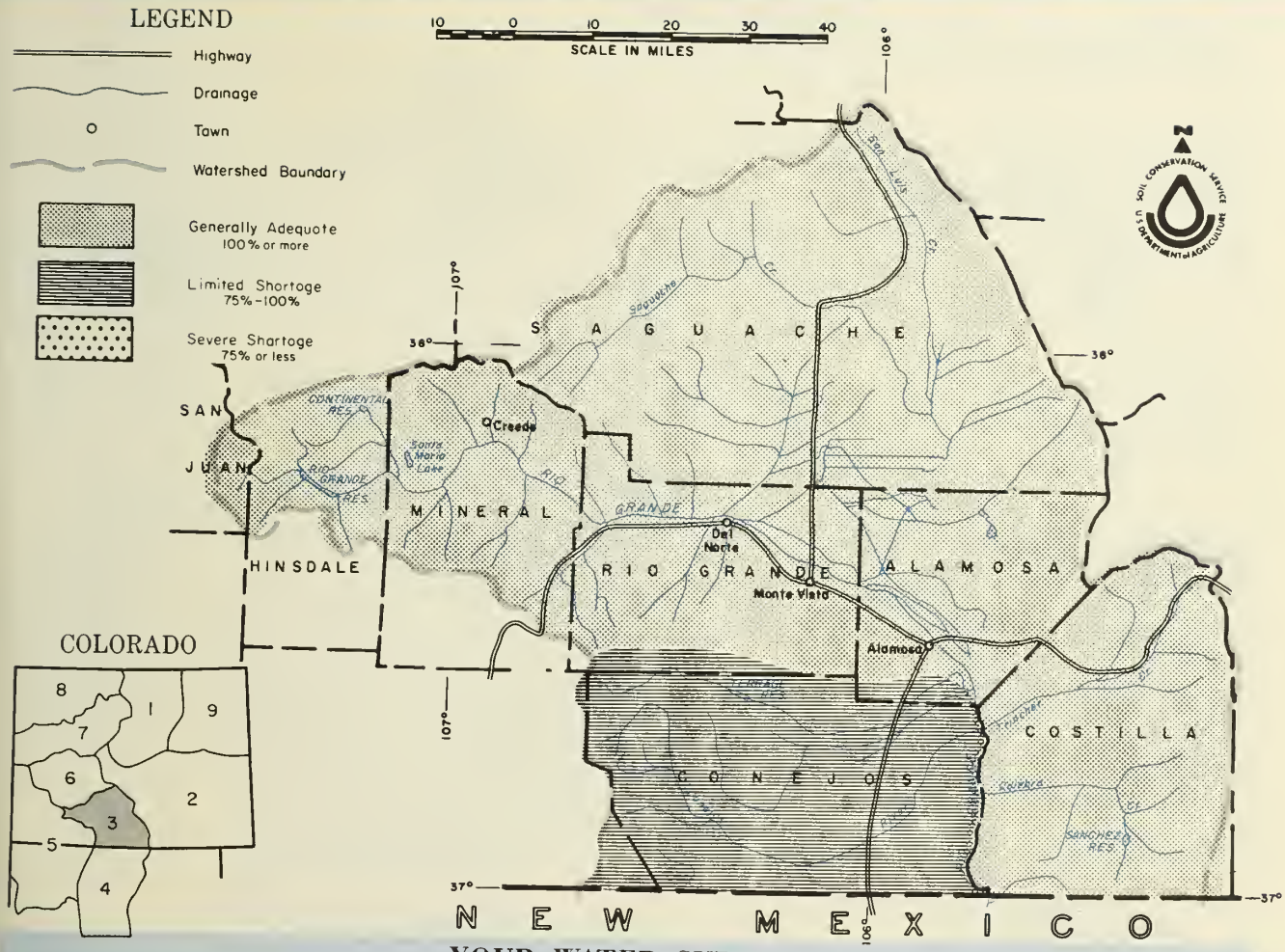

YOUR WATER SUPPLY

SNOWFALL DID NOT KEEP PACE DURING FEBRUARY. CURRENT SNOWPACK IS NOW BARELY NORMAL IN MOST AREAS AND ONLY 76% ON THE CONEJOS. STREAMFLOW FORECASTS HAVE BEEN REDUCED. THEY RANGE FROM 96% ON THE CONEJOS TO 110% ON THE SOUTH FORK. RESERVOIR STORAGE IS 130% OF NORMAL AND WILL BE A GOOD SUPPLEMENT TO SUMMER FLOWS. MORE SNOW IS NEEDED TO INSURE ADEQUATE SUPPLIES THIS SUMMER.

This report prepared by

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	58	94	62
Conejos nr Mogote (1)	165	91	182
Culebra at San Luis (2)	20	105	19
Rio Gr. at 30 Mile Bridge (3)	128	109	117
Rio Gr. nr Del Norte (3)	460	105	438
So. Fork at So. Fork	120	110	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Avg.	Fair
Trinchera Creek	Avg.	Fair

(1) Observed flow plus change in storage in Platora Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	97	91
Conejos	3	94	76
Culebra	2	145	115
Rio Grande	10	134	108

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	1	62	79
Conejos	1	102	91
Culebra	2	81	95
Rio Grande	2	71	92

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	5.8	8.5	4.4
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	16.2	40.0	12.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	10.0	56.4	10.6
Santa Maria	45.0	6.4	10.1	5.5
Terrace	17.7	6.0	0.0	3.7

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of
March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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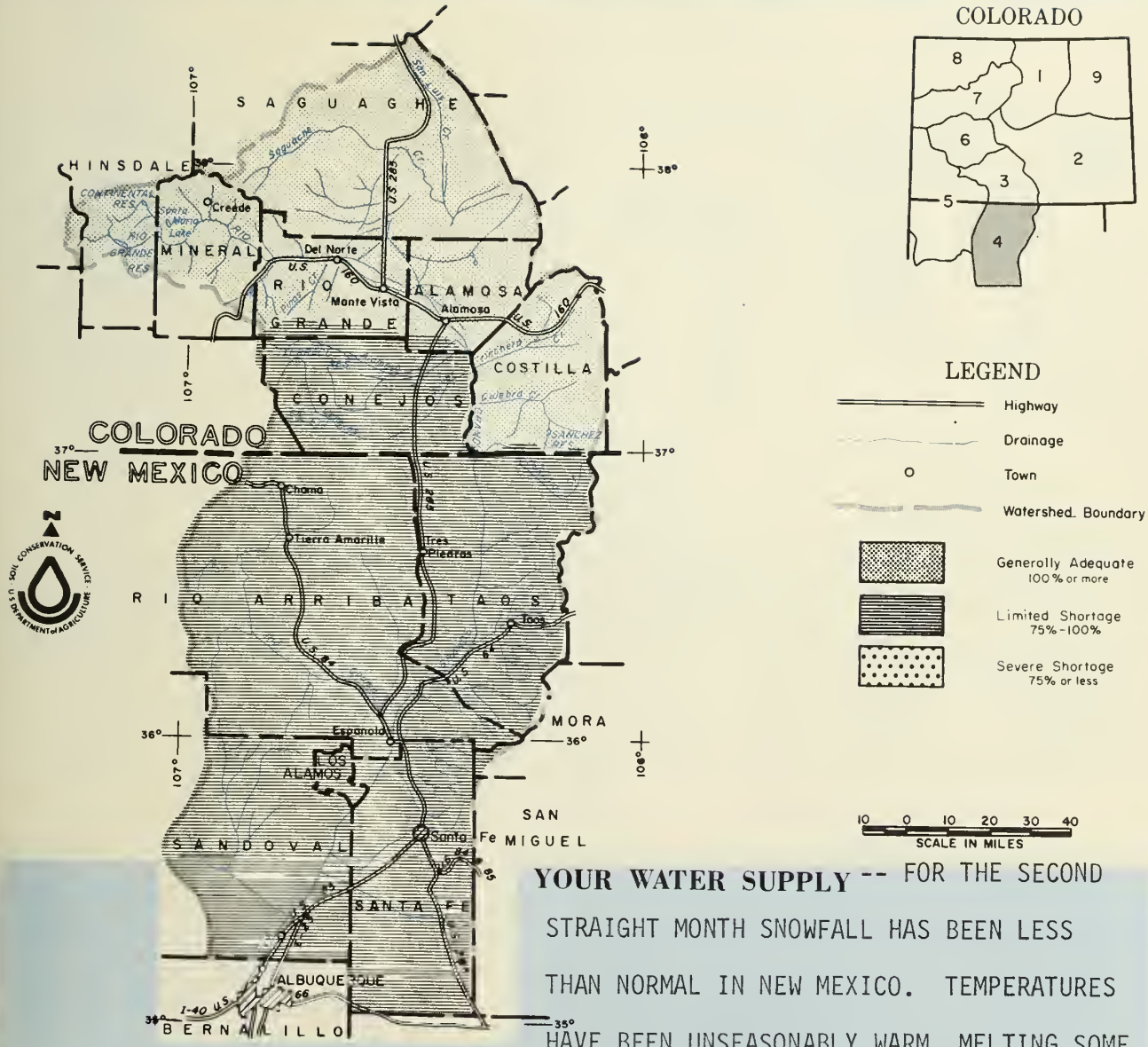

YOUR WATER SUPPLY -- FOR THE SECOND STRAIGHT MONTH SNOWFALL HAS BEEN LESS THAN NORMAL IN NEW MEXICO. TEMPERATURES HAVE BEEN UNSEASONABLY WARM, MELTING SOME OF THE LOW ELEVATION SNOW. STREAMFLOW FORECASTS HAVE BEEN REDUCED AS MUCH AS 20% ON SOME STREAMS. CARRY-OVER RESERVOIR STORAGE IS BELOW THE 15 YEAR AVERAGE. SOILS IN THE IRRIGATED AREAS ARE REPORTED AS FAIR TO GOOD.

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SANTA FE, NEW MEXICO

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	15	83	18
Pecos at Pecos	35	85	41
Rio Chama to El Vado	160	85	188
Rio Gr. at Otowi (2)	500	97	513
Rio Gr. at San Mar (2)	330	99	334
Rio Hondo nr Valdez	15	100	15
Red R. at mouth nr Questa	25	78	32

The forecast of the Rio Grande at San Marcial is 51 *% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.*

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Fair
Jemez River	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Avg.	Fair
Santa Fe Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	233	44
Rio Chama	4	86	59
Rio Grande, N.M.	12	147	72
Rio Hondo	1	134	--
Red River	2	198	93

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	153	117
Rio Chama	2	157	114
Rio Grande	2	112	112
Red River	1	150	126

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	52	57	76
Caballo	344	17	78	81
Conchas	273	79	154	163
Elephant Butte	2195	223	362	370

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	1	1	4
McMillen-Avalon	32	13	18	20

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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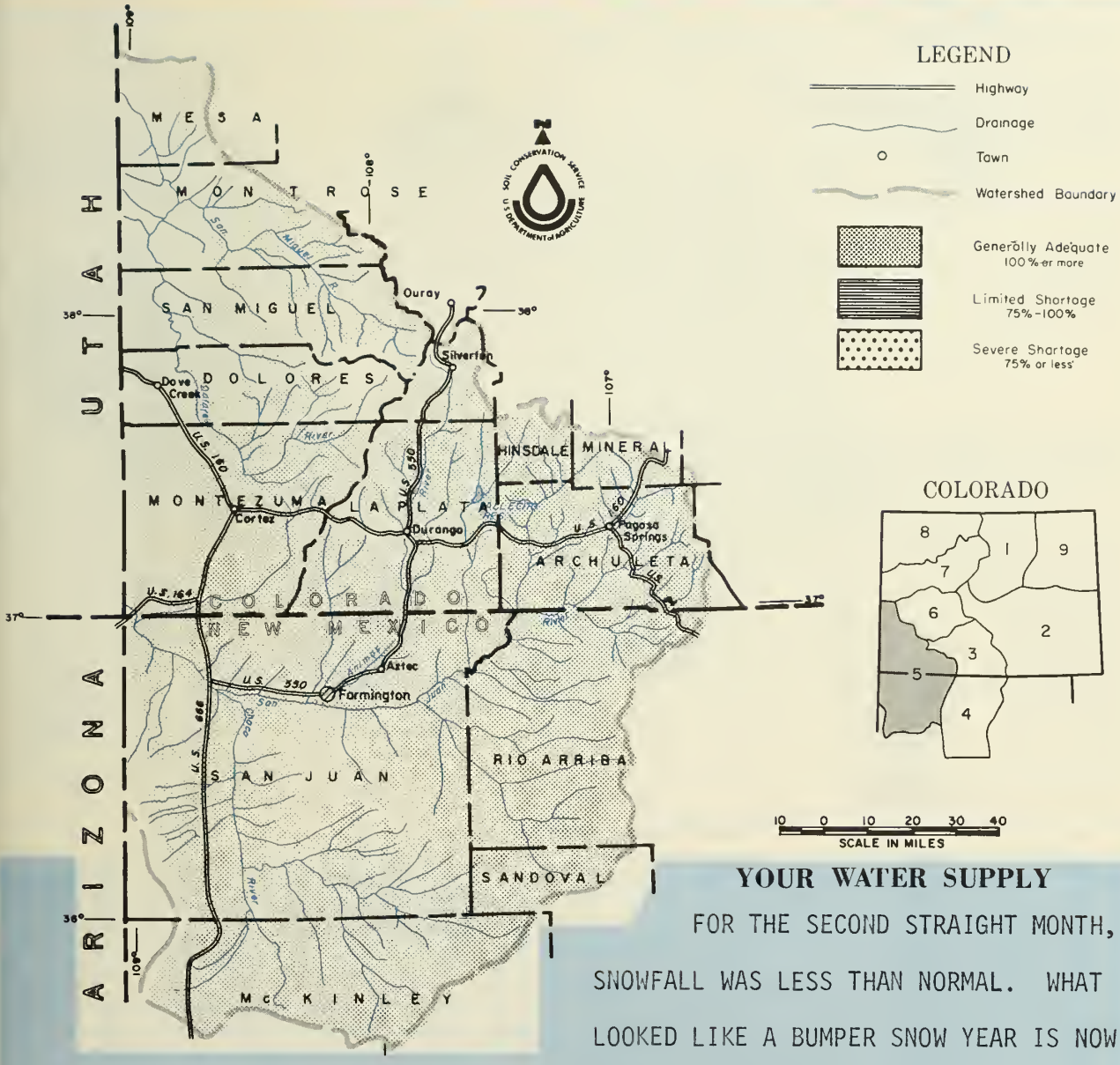

YOUR WATER SUPPLY

FOR THE SECOND STRAIGHT MONTH, SNOWFALL WAS LESS THAN NORMAL. WHAT LOOKED LIKE A BUMPER SNOW YEAR IS NOW BARELY NORMAL. STREAMFLOW FORECASTS HAVE BEEN REDUCED 10 to 20 PERCENT. RESERVOIR STORAGE IS SLIGHTLY ABOVE NORMAL. MORE SNOW IS NEEDED TO INSURE ADEQUATE SUPPLIES THIS SUMMER.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	460	112	409
Dolores at Durango	225	97	231
La Plata at Hesperus	25	104	24
Los Pinos at Bayfield (1)	200	103	194
Piedra Cr. at Piedra	140	86	163
San Juan at Carracas	400	106	379
Inflow to Navajo Res. (1) (Apr-Jul)	600	97	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Avg.
Mancos	Avg.	Avg.
San Miguel	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	103	102
Dolores	4	88	97
San Juan	5	113	93

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	90	97
Dolores	3	98	92
San Juan	2	100	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	9	14	7
Lemon	40	19	26	15
Navajo	1036	880	852	537
Vallecito	126	50	74	48

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of
March 1, 1972

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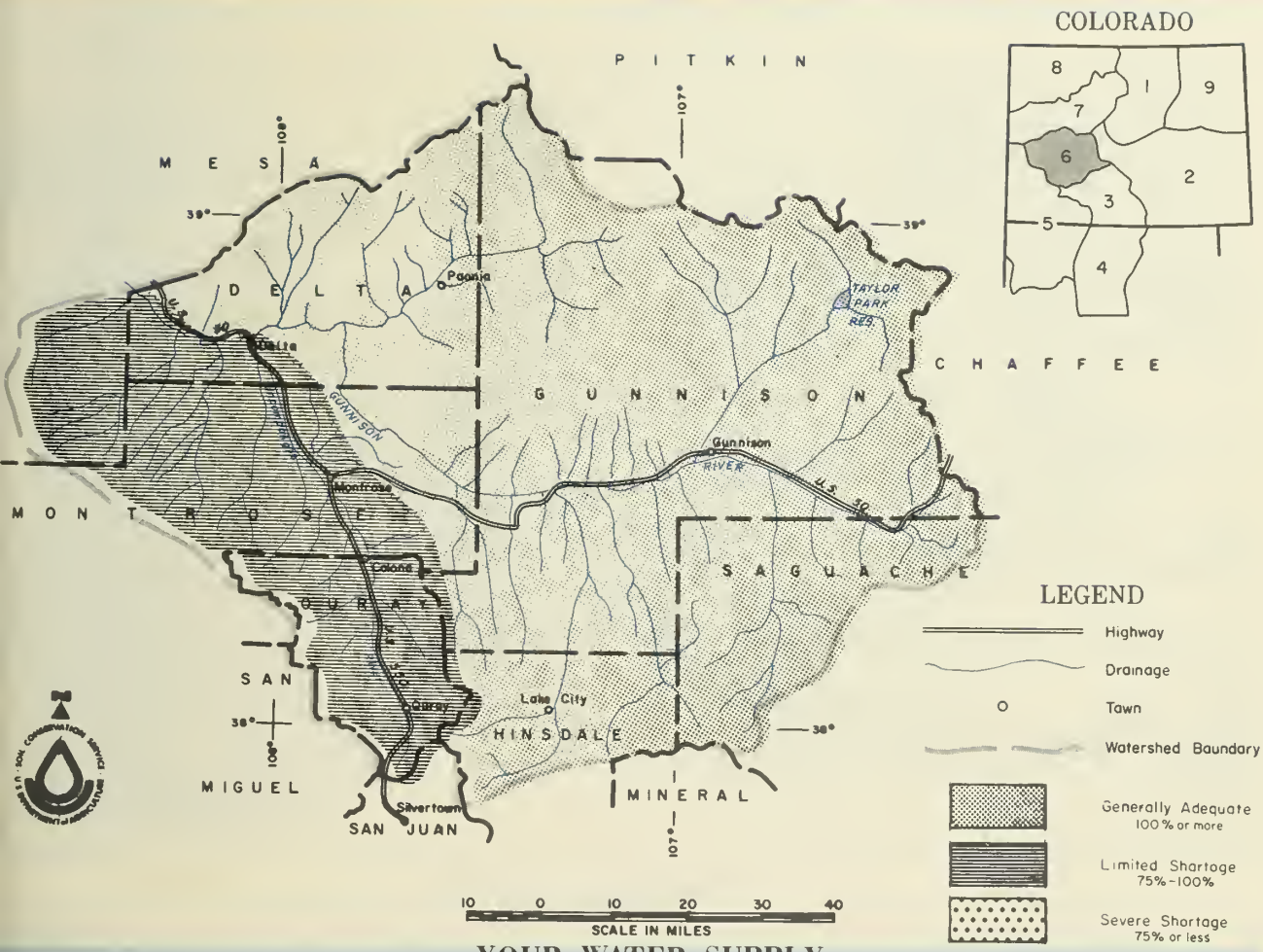

YOUR WATER SUPPLY

THE MOUNTAIN SNOWPACK DROPPED TO NORMAL OR SLIGHTLY BELOW DUE TO THE BELOW AVERAGE SNOWFALL DURING FEBRUARY. STREAMFLOW FORECASTS ALSO WERE REDUCED. THE GUNNISON SHOULD FLOW ABOUT NORMAL IF SNOWFALL IS AT LEAST NORMAL FOR THE REMAINDER OF THE YEAR. SURFACE CREEK SHOULD FLOW JUST ABOVE NORMAL AND THE UNCOMPAHGRE SLIGHTLY BELOW. BLUE MESA RESERVOIR CONTAINS 323,000 A.F. WHICH IS 77% OF LAST YEAR. MOUNTAIN SOIL MOISTURE IS BETTER THAN NORMAL.

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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison R. inflow to Blue Mesa Res.	740	96	767
Gunnison nr Gr. Junction (1)	1150	101	1137
Surface Cr. nr Cedaridge	17	106	16
Uncompahgre at Colona	115	89	129

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Avg.	Avg.
Taylor	Avg.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	100	100
Surface Creek	3	96	102
Uncompahgre	3	82	100

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	91	111
Surface Creek	1	89	106
Uncompahgre	1	89	106

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	323	421	--
Morrow Point	121	116	116	--
Taylor	106	68	99	56

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period

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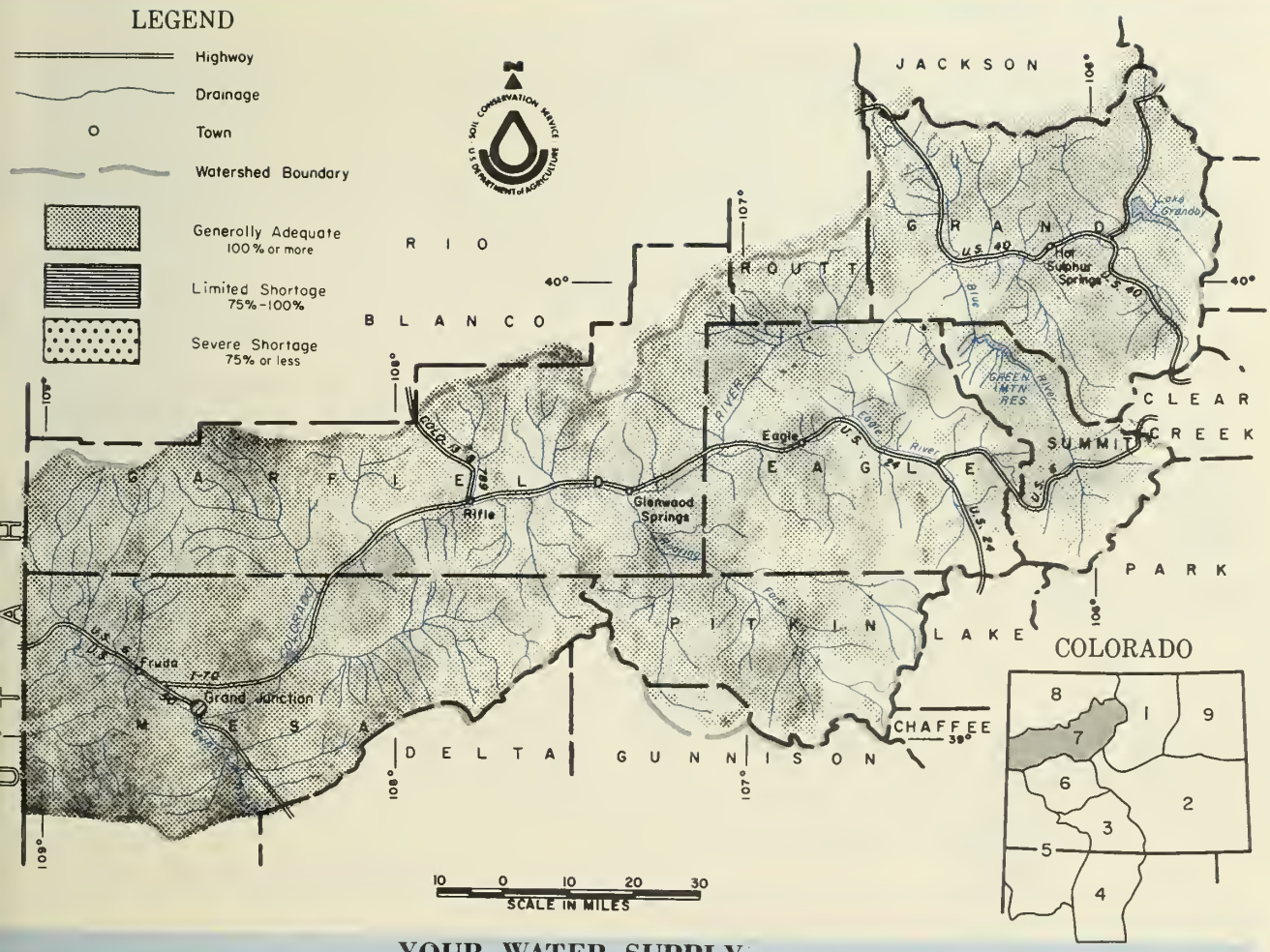
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO

as of

March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL WAS BELOW NORMAL DURING THE MONTH BUT THE SNOWPACK IS STILL SLIGHTLY ABOVE AVERAGE ON ALL BASINS EXCEPT PLATEAU CREEK. THIS AREA IS SLIGHTLY BELOW AVERAGE. STREAMFLOW FORECASTS FOR THE APRIL THROUGH SEPTEMBER PERIOD RANGE FROM 98% TO 112% OF THE 1953-67 AVERAGE. THE COLORADO MAINSTEM AND THE ROARING FORK ARE FORECAST AT 105%. RESERVOIR STORAGE IS ABOUT THE SAME AS LAST YEAR.

This report prepared by

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SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

DENVER, COLORADO

GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue ab Gr. Mt. (1)	240	101	236
Colo. Rv. inflow to Granby Res. (2)	225	103	219
Colo. Rv. nr Dotsero (3)	1450	105	1375
Roar. Fk. at GlSpr. (4)	725	105	692
Wm. Fk. nr Par. (5)	67	112	60
Will. Cr. inflow to Will. Cr. Res.	45	98	46
Colo. nr Cameo (6)	2200	99	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Fair
Eagle River	Exc.	Fair
Gypsum Creek	Exc.	Fair

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	91	109
Colorado	21	83	113
Plateau	3	91	95
Roaring Fork	7	90	106
Williams Fork	3	71	111
Willow	2	87	118

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	79	96
Colorado	5	85	92
Roaring Fork	1	83	112
Willow	1	103	124

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	236	246	234
Granby	466	341	367	233
Green Mountain	147	79	74	63
Homestake	43	10	20	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	66	71	--
Williams Fork	97	55	49	27
Willow Creek	9	8	7	6
Vega	32	14	17	11

+ 1953-1967 period.

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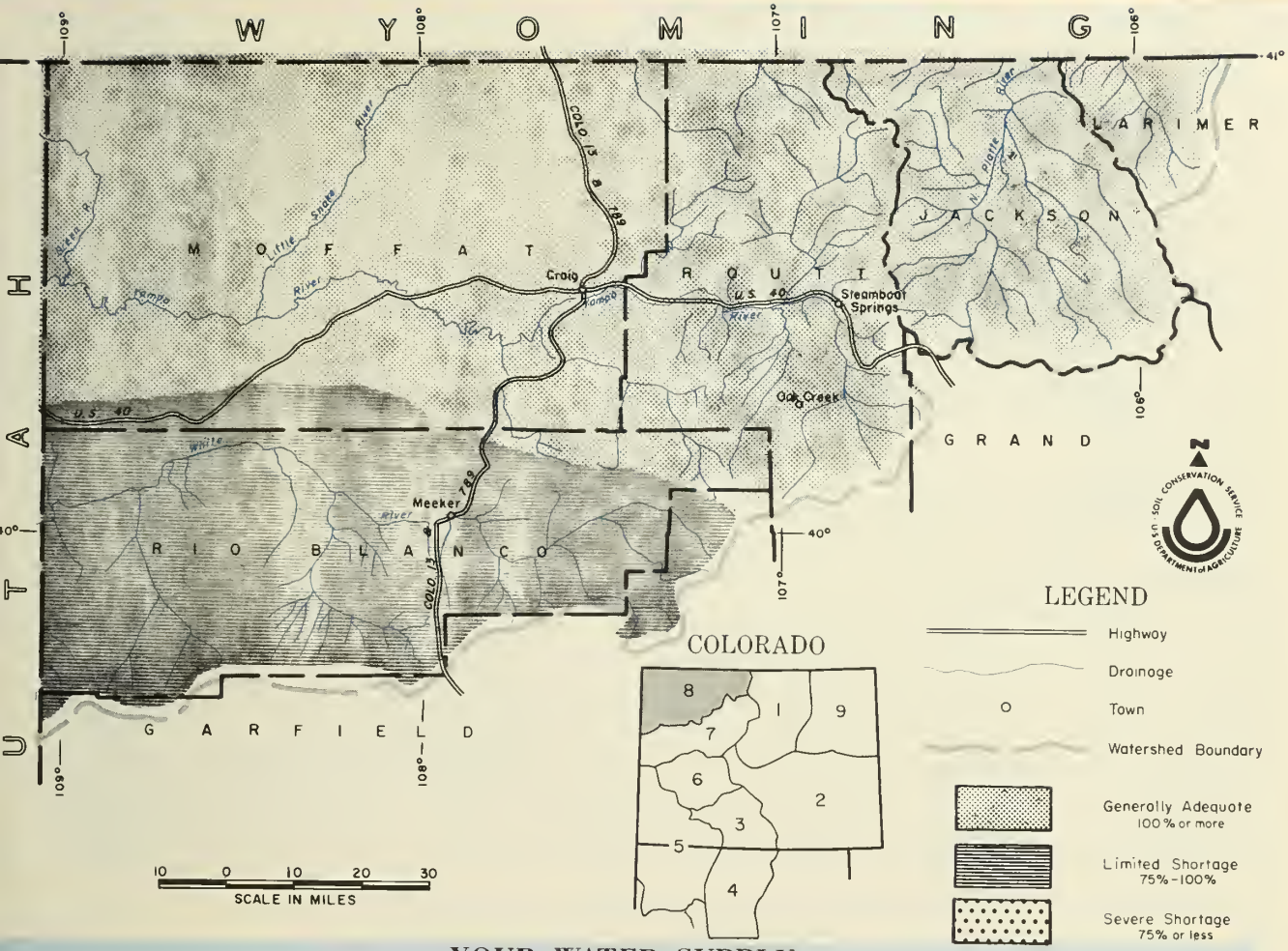
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FEBRUARY SNOWFALL WAS LESS THAN NORMAL. WARM TEMPERATURES REDUCED THE LOW ELEVATION SNOWS TO BELOW NORMAL IN MOST PLACES. HIGH WINDS REDISTRIBUTED THE SNOWPACK AND EVAPORATED SOME. STREAMFLOW FORECASTS ARE GENERALLY DOWN FROM LAST MONTH, BUT STILL NEAR THE 15 YEAR NORMAL. THE LITTLE SNAKE AND NORTH PLATTE ARE BOTH BEING FORECAST ABOVE NORMAL. SOIL MOISTURE IS NEAR NORMAL.

This report prepared by
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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	190	100	191
Laramie at Jelm	120	115	104
Little Snake at Lily	375	135	277
No. Platte at Northgate	258	120	215
White nr Meeker	250	85	293
Yampa nr Maybell	850	100	853
Yampa at Steamboat Springs	260	100	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Fair
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	2	89	91
Laramie	2	72	109
North Platte	5	78	116
White	2	75	89
Yampa	5	82	106

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	92	91
North Platte	2	106	115
Yampa	1	89	96

+ 1953-1967 period.

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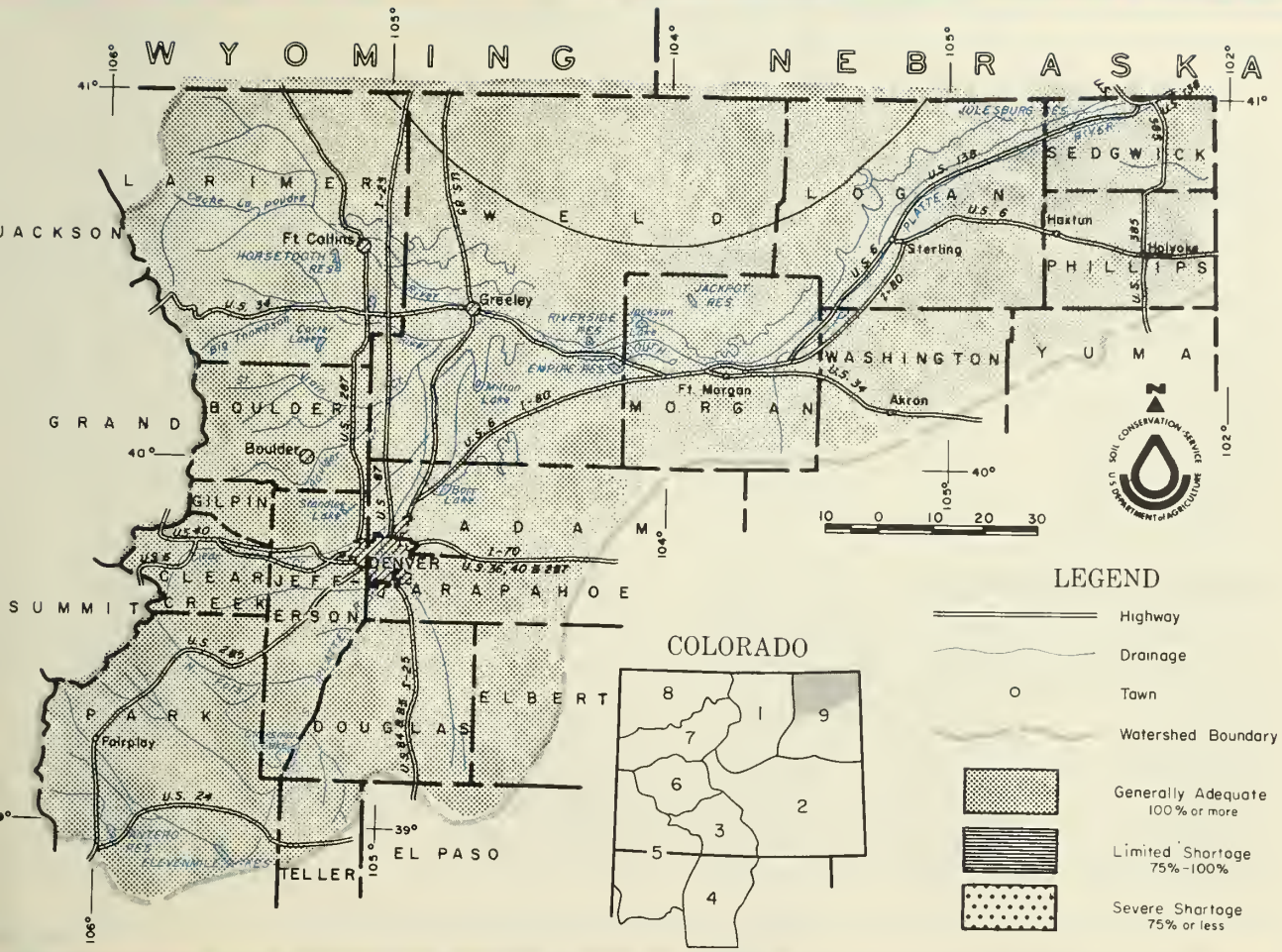
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
March 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY OUT-LOOK WAS NOT QUITE SO GOOD THIS MONTH. MOUNTAIN SNOWFALL DURING FEBRUARY WAS BELOW NORMAL. FORECASTS DROPPED AS MUCH AS 15% UP AND DOWN THE BASIN. RESERVOIR STORAGE IS STILL EXCELLENT. PRACTICALLY ALL RESERVOIRS CONTAIN MORE THAN THE 15 YEAR NORMAL. MOUNTAIN SOILS CONTAIN ABOUT NORMAL MOISTURE. IRRIGATED SOILS ARE IN FAIR CONDITION.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	110	110	100
Boulder at Orodell	55	112	49
Cache La Poudre at Canyon Mouth (2)	225	105	215
Clear Cr. at Golden(3)	130	109	119
Saint Vrain at Lyons(4)	80	114	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg.	Avg.
South Platte from Ft. Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	91	114
Boulder	3	103	112
Cache La Poudre	8	78	111
Clear Creek	6	78	91
Saint Vrain	3	111	114
South Platte	3	119	110

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	97	110
Boulder	1	73	95
Cache La Poudre	2	92	91
Clear Creek	2	69	79
Saint Vrain	2	89	117
South Platte	2	98	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	97.5	100.1	71.3
Cheesman	79.0	79.1	72.6	46.4
Eleven Mile	97.8	73.5	96.4	72.0
Empire	37.7	23.7	31.2	27.2
Horsetooth	143.5	106.5	106.3	93.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	32.9	34.9	30.8
Julesburg	28.2	19.8	19.8	20.7
Prewitt	32.8	22.6	19.8	14.5
Point of Rocks	70.0	63.9	69.8	49.9
Riverside	57.5	55.4	56.8	44.6

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1972

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/29	45	13.4	17.5	12.6
McIntype	NS				- -
Roach	2/28	55	16.0	23.4	14.4
North Platte River					
Cameron Pass	2/25	72	25.5	33.4	18.8
Columbine Lodge	2/25	73	23.1	25.3	19.6
Northgate	2/25	16	3.3	7.5	5.3
Park View	2/28	31	7.8	10.4	7.2
Willow Cr. Pass (B)	2/28	37	10.7	13.8	9.8
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/28	20	6.1	6.5	5.8
Boulder Falls	2/28	40	12.4	11.6	9.1
University Camp	2/28	51	15.7	15.0	15.6
Big Thompson River					
Deer Ridge	2/29	13	3.7	3.4	3.9
Hidden Valley	2/25	32	7.7	10.4	7.9
Lake Irene (B)	2/27	61	19.2	22.1	18.2
Long's Peak	2/25	42	10.3	10.2	8.0
Two Mile	2/29	49	14.9	15.3	10.9
Cache La Poudre					
Bennett Creek	2/26	26	6.2	8.3	- -
Big South	2/28	1	0.4	0.7	2.4
Cameron Pass	2/25	72	25.5	33.4	18.8
Chambers Lake	2/28	25	7.2	10.1	7.2
Deadman Hill	2/29	45	13.4	17.5	12.6
Hour Glass Lake	2/26	23	5.9	6.7	5.1
Joe Wright	2/25	66	18.9	24.9	- -
Lost Lake	2/28	38	11.1	12.8	9.6
Pine Creek	2/28	4	1.1	1.5	1.6
Red Feather	2/28	22	5.2	7.3	5.6
Clear Creek					
Baltimore (B)	2/28	20	6.1	6.5	5.8
Berthoud Falls	2/28	46	11.8	12.8	11.5
Empire	2/28	17	5.1	7.0	6.0
Grizzly Peak (B)	2/28	55	15.5	19.1	13.4
Loveland Lift	2/29	35	9.2	15.9	17.7
Loveland Pass	2/29	46	12.9	16.4	12.3
Saint Vrain River					
Copeland Lake	2/27	19	5.1	3.4	3.7
Ward	2/28	21	4.4	5.4	4.8
Wild Basin	2/27	42	11.2	9.9	9.7
South Platte River					
Como	2/29	29	8.3	5.3	- -
Geneva Park	2/29	18	3.5	1.9	3.1
Horseshoe Mt.	2/28	46	11.9	8.1	- -
Hoosier Pass	2/25	50	11.3	9.6	10.5
Jefferson Creek	2/29	33	8.2	7.8	7.4
Mosquito	2/29	43	11.3	6.6	- -
Trout Creek Pass	2/28	23	6.2	2.1	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/28	12	2.3	7.1	4.8
Cooper Hill (B)	2/28	39	8.7	9.3	8.5
East Fork	2/25	35	8.2	8.8	7.6
Four Mile Park	2/28	24	5.7	3.9	4.6
Fremont Pass	2/25	51	12.6	14.9	12.4
Garfield	2/29	37	11.0	10.9	11.4
Hermit Lake	2/25	23	6.6	7.6	- -
Monarch Pass	2/29	45	14.3	13.3	14.3
Tennessee Pass	2/28	38	9.8	7.4	8.5
Twin Lakes Tunnel	2/28	43	10.8	7.7	8.6
Westcliffe	2/25	23	5.8	5.8	5.7
Cucharas River					
Blue Lakes	2/28	0	0.0	0.9	3.5
Cucharas Pass	2/28	12	4.4	6.1	- -
LaVeta Pass (B)	2/28	26	8.4	6.2	7.8
Purgatorie River					
Bourbon	2/25	23	5.0	5.5	6.4
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/28	8	2.2	3.5	5.5
Summitville	2/25	54	16.1	15.3	14.6
Conejos River					
Cumbres	2/25	40	12.8	13.9	16.5
LaManga	2/25	42	12.3	- -	- -
Platoro	2/28	39	12.8	11.6	13.8
River Springs	2/28	8	2.0	3.8	5.8
Culebra River					
Brown Cabin	2/29	15	4.1	0.1	- -
Cottonwood (B)	NS				- -
Culebra	2/28	30	9.0	5.8	7.3
LaVeta Pass (B)	2/28	26	8.4	6.2	7.8
Trinchera (B)	2/28	31	7.8	7.4	- -
Rio Grande					
Cochetopa Pass	2/25	25	5.4	5.0	4.5
Grayback	NS				- -
Hiway	2/28	53	19.8	17.1	21.4
Lake Humphrey	2/25	29	7.4	4.0	6.2
Love Lake	2/29	34	10.2	5.6	- -
Pass Creek	2/28	30	10.5	7.8	10.8
Pool Table	2/29	28	6.4	2.4	5.9
Porcupine	2/29	40	11.6	6.9	8.7
Santa Maria	2/28	17	4.2	2.3	4.4
Upper Rio Grande	2/29	33	10.5	6.5	6.6
Wolf Creek Pass	2/28	57	21.2	19.5	22.9
Wolf Cr. Sum. (B)	2/28	67	26.1	20.1	22.1
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	2/28	6	1.4	0.6	3.2
Rio Chama					
Bateman	2/23	30	6.8	6.9	9.4
Capulin Peak	2/27	11	3.5	3.8	4.5
Chama Divide	2/24	2	0.5	0.8	3.6
Chamita	2/24	17	4.3	6.1	7.9
Rio Grande					
Aspen Grove	2/25	15	4.5	2.4	5.2
Big Tesuque	2/28	15	4.2	1.8	4.6
Blue Bird Mesa	2/26	5	1.5	1.3	4.7
Cordova	2/23	27	6.2	6.5	9.7
Elk Cabin				1.2	3.3
Fenton Hill	2/26	19	4.8	1.3	3.9
Hopewell	2/24	39	11.1	- -	- -
Pajarito Peak	2/28	0	0.0	1.8	1.5
Payrole	2/29	20	5.4	4.8	7.8
Quemazon	2/29	26	6.8	3.9	7.7
Rio En Medio	2/28	24	6.3	4.7	7.9
Sandoval	2/29	13	5.1	0.7	5.0
Taos Canyon	2/24	5	1.6	2.2	4.4
Tres Ritos	2/24	6	1.9	1.5	4.8
Rio Hondo					
Twinning	2/24	17	4.7	3.5	- -
Red River					
Hematite Park (B)	2/23	11	2.6	1.0	3.7
Red River	2/23	21	5.7	3.2	5.2

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1972

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG. 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/28	27	8.5	7.5	10.2
Lemon	2/29	19	6.5	6.0	- -
Mineral Creek	2/28	36	11.7	13.4	11.7
Molas Lake	2/28	32	10.4	10.8	11.0
Purgatory	2/28	53	19.1	12.7	- -
Red Mt. Pass (B)	2/28	69	25.8	27.2	23.5
Silverton Sub-Sta.	2/28	22	6.7	5.6	5.6
Spud Mountain	2/28	52	20.1	16.5	19.5
Dolores River					
Lizzard Head	2/29	39	13.3	13.1	12.6
Lone Cone	2/29	39	13.0	14.6	- -
Rico	2/29	16	5.8	5.3	6.8
Telluride	2/28	23	6.4	8.3	5.9
Trout Lake	2/28	33	9.5	13.0	10.7
San Juan River					
Chama Divide (B)	2/24	2	0.5	0.8	3.6
Chamita (B)	2/24	17	4.3	6.1	7.9
Upper San Juan	2/28	60	23.5	20.7	25.2
Wolf Cr. Pass (B)	2/28	57	21.2	19.5	22.9
Wolf Cr. Summit	2/28	67	26.1	20.1	22.1
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/28	53	19.6	19.0	17.0
Blue Mesa	2/29	26	7.0	5.5	3.5
Butte	2/29	36	10.6	11.5	- -
Cochetopa Pass (B)	2/25	25	5.4	5.0	4.5
Crested Butte	2/29	35	9.8	8.4	10.6
Keystone	2/25	53	15.4	16.8	16.3
Lake City	2/24	31	6.8	5.8	7.6
Mesa Lakes (B)	2/28	42	13.1	13.1	13.4
McClure Pass	2/28	42	14.7	13.1	14.6
Park Cone	2/28	36	8.9	7.5	8.8
Park Reservoir	2/25	58	18.1	20.6	19.6
Porphyry Creek	2/29	40	11.0	13.5	13.9
Tomichi	2/29	35	10.4	11.3	10.2
Surface Creek					
Alexander Lake	2/28	53	19.6	19.0	17.0
Mesa Lakes (B)	2/28	42	13.1	13.1	13.4
Park Reservoir	2/25	58	18.1	20.6	19.6
Uncompahgre River					
Ironton Park	2/29	27	7.6	13.0	10.4
Red Mountain Pass	2/28	69	25.8	27.2	23.5
Telluride (B)	2/28	23	6.4	8.3	5.9
COLORADO BASIN					
Blue River					
Blue River	2/25	35	7.1	7.0	7.3
Fremont Pass	2/25	51	12.6	14.9	12.4
Frisco	2/28	25	6.3	6.4	6.3
Grizzly Peak	2/28	55	15.5	19.1	13.4
Hoosier Pass (B)	2/25	50	11.3	9.6	10.5
Shrine Pass	2/28	54	16.0	17.3	13.6
Snake River	2/28	29	6.4	9.0	6.7
Summit Ranch	2/29	28	7.6	7.3	6.0

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	AVG. 53 67
Colorado River					
Arrow	2/24	40	12.0	15.4	9.3
Berthoud Pass	2/25	51	14.0	17.8	11.6
Berthoud Summit	2/28	61	14.1	20.0	14.8
Cooper Hill	2/28	39	8.7	9.3	8.5
Fiddler Gulch	NS				13.5
Glenmar Ranch	2/28	31	8.4	9.5	6.4
Gore Pass	2/29	33	9.6	12.0	8.4
Grand Lake	2/29	32	8.1	8.5	6.6
Lake Irene	2/27	61	19.2	22.1	18.2
Lapland	2/22	35	10.3	12.7	8.6
Lulu	2/29	58	16.9	20.4	13.2
Lynx Pass	2/29	40	11.0	14.6	10.0
McKenzie Gulch	2/28	27	7.2	5.7	4.8
Middle Fork	2/28	33	7.5	10.9	7.5
Milner	2/27	42	11.7	14.3	11.1
North Inlet	2/28	29	7.9	9.2	7.4
Pando	2/25	33	9.2	9.5	7.9
Phantom Valley	2/27	32	7.7	11.5	8.5
Ranch Creek	2/24	32	8.1	12.3	7.1
Tennessee Pass(B)	2/28	38	9.8	7.4	8.5
Vail Pass	2/28	48	15.5	17.7	14.0
Vasquez	2/25	46	11.6	14.6	9.5
Roaring Fork River					
Aspen	2/26	5[illegible]	15.4	19.8	13.0
Chapman	2/28	48	14.6	14.8	- -
Independence Pass	2/25	49	12.7	15.9	13.9
Ivanhoe	2/29	4[illegible]	15.3	18.6	13.3
Kiln	2/29	[illegible]	11.9	10.8	- -
Last Chance	2/29	36	10.4	10.8	- -
Lift	2/26	5[illegible]	13.9	15.3	13.8
McClure Pass	2/28	[illegible]	14.7	13.1	14.6
Nast	2/29	2[illegible]	5.5	6.7	5.2
North Lost Trail	2/28	4[illegible]	15.0	13.1	13.[illegible]
Williams Fork River					
Glenmar Ranch	2/28	31	8.4	9.5	6.4
Jones Pass	2/24	43	11.7	18.5	10.9
Middle Fork	2/28	33	7.5	10.9	7.5
Willow Creek					
Granby	2/28	31	8.0	7.6	6.1
Willow Cr. Pass	2/28	37	10.7	13.8	9.8
Plateau Creek					
Mesa Lakes	2/28	42	13.1	13.1	13.4
Park Reservoir	2/25	58	18.1	20.6	19.6
Trickle Divide	2/25	64	20.1	22.4	21.[illegible]
YAMPA BASIN					
Elk River					
Clark	2/29	34	8.6	9.1	11.5
Elk River	2/29	5[illegible]	16.0	18.5	15.5
Hahn's Peak	2/29	40	1[illegible].3	14.1	- -
White River					
Burro Mountain	2/24	42	13.0	17.9	15.2
Rio Blanco	2/25	46	12.0	15.6	12.9
Yampa River					
Bear River				- -	- -
Columbine Lodge(B)	2/25	73	23.1	25.3	19.6
Dry Lake	2/24	52	16.5	18.8	17.6
Lynx Pass (B)	2/29	40	11.0	14.6	10.0
Rabbit Ears	2/[illegible]	[illegible]	22.3	28.6	2[illegible].2
Yampa View	2/[illegible]	44	12.7	16.7	12.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/3/71	11.1	6.8	6.2	6.4
Willow Pass	11/10/71	9.5	8.3	8.1	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	11/1/71	6.9	3.5	4.8	3.7
Big Thompson River					
Beaver Dam	11/2/71	7.1	5.3	5.1	3.8
Guard Station	11/2/71	6.9	3.2	4.1	3.4
Two Mile	11/2/71	9.1	5.5	5.2	5.5
Clear Creek					
Clear Creek	12/20/71	9.5	5.3	8.1	7.1
Hoop Creek	11/10/71	4.9	2.6	3.4	2.9
Cache La Poudre River					
Feather	10/7/71	10.1	4.7	4.5	4.5
Laramie Road	10/1/71	12.4	6.5	7.7	7.8
South Platte River					
Hoosier Pass	11/8/71	7.8	4.4	5.6	4.9
Kenosha Pass	11/8/71	4.4	2.6	2.6	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/12/71	6.7	4.2	4.4	3.9
Leadville	10/6/71	7.8	3.4	3.3	4.2
Twin Lakes Tunnel	10/6/71	4.5	0.9	1.7	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	10/20/71	10.7	5.0	4.9	5.5
Rio Grande					
Bristol View	10/21/71	6.1	3.1	5.0	3.9
LaVeta	10/20/71	11.9	7.1	9.4	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	2/23/72	6.7	4.2	1.3	3.2
Chamita	2/24/72	8.0	4.1	4.0	4.1
Rio Grande					
Aqua Piedra	2/24/72	7.2	4.2	4.4	3.7
Big Tesuque	NS			0.9	1.9
Rio En Medio	NS			0.4	1.2
Taos Canyon	2/24/72	3.3	2.5	1.6	2.3
Red River					
Red River Summit	2/23/72	4.8	2.4	1.6	1.9

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/2/71	9.1	5.5	5.5	6.3
Mineral Creek	11/1/71	5.7	3.1	3.5	3.7
Molas Lake	11/1/71	9.4	5.5	6.6	4.6
Dolores River					
Dolores	10/28/71	19.6	10.6	8.0	6.7
Lizzard Head	10/28/71	11.8	3.9	4.6	8.3
Rico	10/28/71	13.8	8.5	10.9	9.9
GUNNISON BASIN					
Gunnison River					
King	10/12/71	3.3	2.1	2.3	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	11/8/71	4.2	2.7	3.4	2.8
Colorado River					
Berthoud Pass	11/10/71	3.9	2.5	3.1	2.8
Gore	11/8/71	4.9	3.3	3.0	2.5
Grand Mesa	11/8/71	12.5	9.9	11.1	9.3
Ranch Creek	11/10/71	8.7	4.7	5.7	6.0
Vail	10/25/71	12.3	4.9	7.0	6.9
Roaring Fork River					
Placita	11/12/71	9.3	5.8	7.0	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/3/71	19.0	11.3	12.7	11.8

USDA SCS PORTLAND OREG 1967 MPL-1845

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service
Soil Conservation Service

Department of Interior

Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

Department of Commerce

National Weather Service

War Department

Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costillo Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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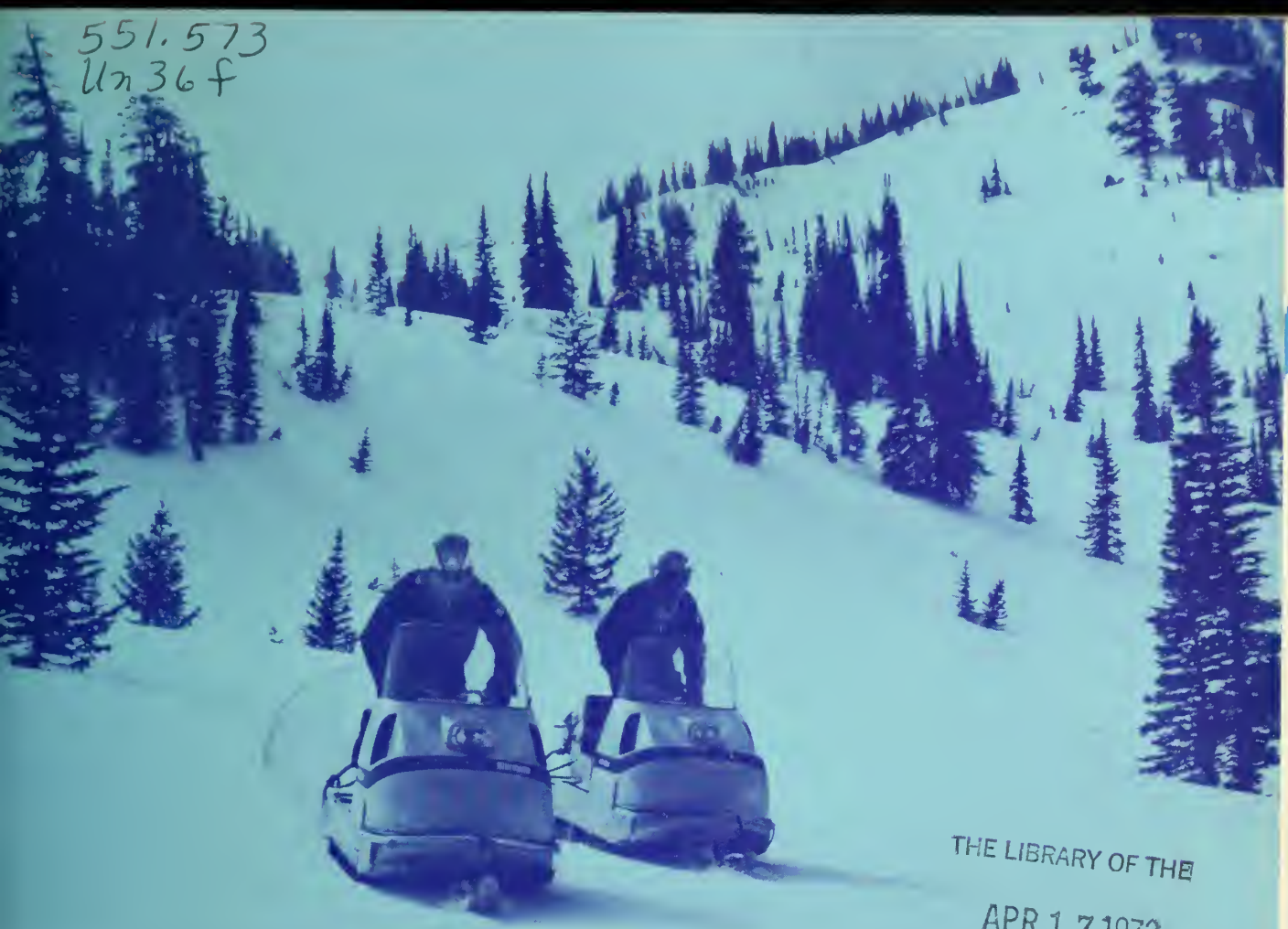

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
APR. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS PORTLAND OREG 970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Puebla, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgataire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes wa ter supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pajoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncampahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Baakcliff, Eagle Caunty, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Rautt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

April 1, 1972

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

April 1, 1972 as of

SNOWFALL WAS MUCH BELOW NORMAL FOR THE TWO STATE AREA FOR THE SECOND STRAIGHT MONTH. MANY SNOW COURSES ARE NEARING THE MINIMUM OF RECORD EXPECIALLY IN SOUTHERN COLORADO AND NEW MEXICO. STREAMFLOW FORECASTS WERE REDUCED ACCORDINGLY. SOME FORECASTS WERE REDUCED AS MUCH AS 30 PERCENT. RESERVOIR CARRY-OVER STORAGE IS GOOD IN THE NORTHERN HALF OF COLORADO AND NEAR NORMAL OVER THE REMAINDER OF THE TWO STATES. THIS WILL HELP AUGMENT THE EXPECTED LOW STREAMFLOW. SOIL MOISTURE IN THE MOUNTAINS HAS BEEN INCREASED DUE TO MELTING SNOW; HOWEVER, VALLEY SOILS REMAIN DRY.

COLORADO

-- THE NORTHERN THIRD OF COLORADO CAN STILL EXPECT NEAR NORMAL STREAMFLOW; HOWEVER, THESE FORECASTS HAVE BEEN LOWERED AS MUCH AS 20 PERCENT. FORECASTS ON THE SOUTH PLATTE STREAMS VARY FROM 86 PERCENT OF NORMAL TO A HIGH OF 92 PERCENT. RESERVOIR STORAGE IS EXCELLENT. THE ARKANSAS SHOULD FLOW ABOUT 85 PERCENT AND HAS NEAR AVERAGE STORAGE. THE RIO GRANDE AND SAN JUAN BASINS WILL HAVE A SHORTAGE OF WATER UNLESS APRIL PRODUCES MUCH ABOVE NORMAL SNOW. THE COLORADO MAINSTEM AND YAMPA-WHITE RIVERS SHOULD PROVIDE ADEQUATE WATER IF APRIL SNOWFALL IS NORMAL.

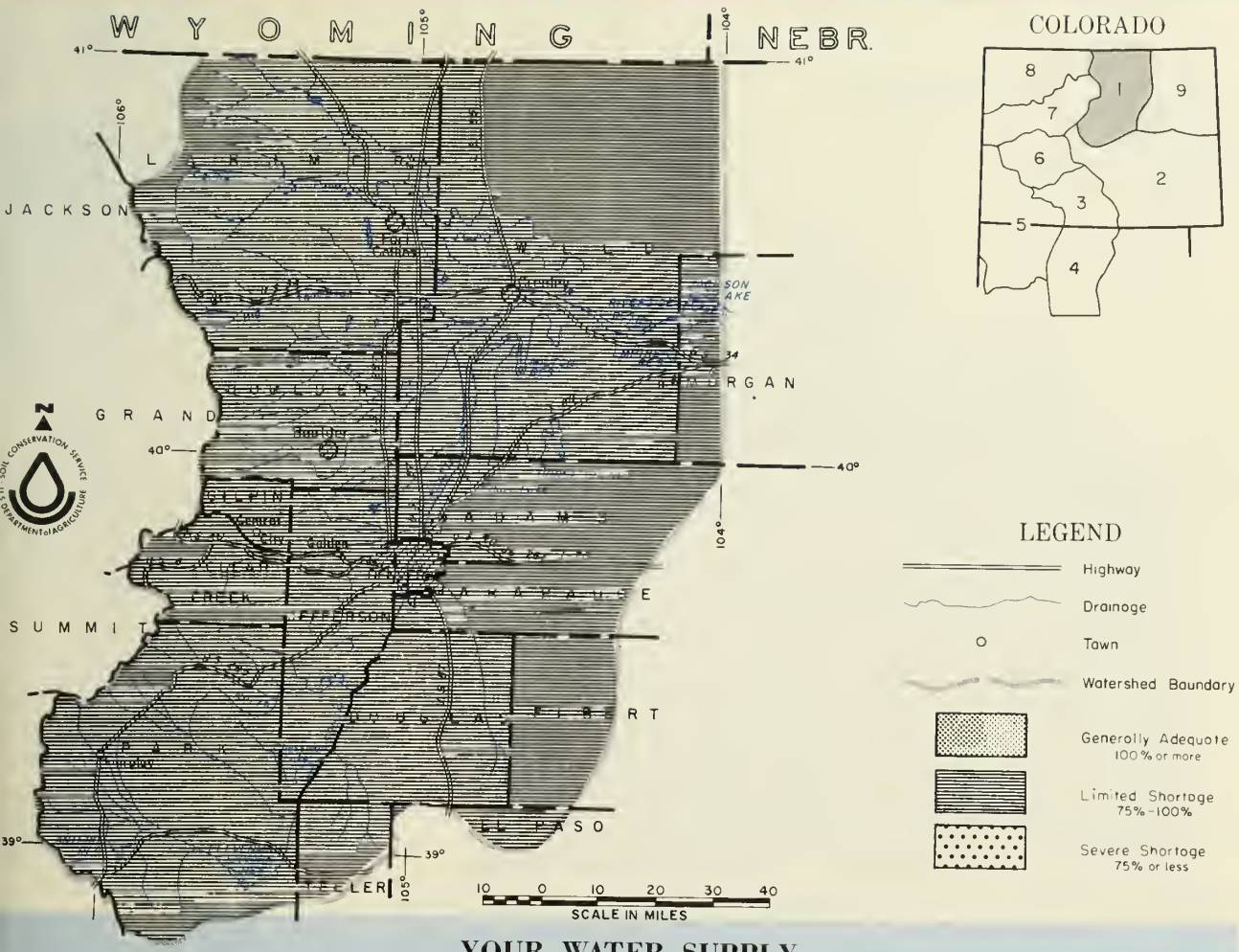
NEW MEXICO

-- STREAMFLOW FORECASTS HAVE BEEN REDUCED AS MUCH AS 30 PERCENT REFLECTING THE MUCH BELOW AVERAGE SNOWFALL DURING FEBRUARY AND MARCH. TEMPERATURES HAVE BEEN UNSEASONABLY HIGH AND HAVE CAUSED CONSIDERABLE SNOW MELT. RIVERS HAVE STARTED TO RISE. CARRY-OVER STORAGE WAS DEPLETED LAST YEAR AND NOW STANDS AT 59 PERCENT. MOUNTAIN SOILS ARE WET REFLECTING THE MELTING SNOW. NAVAJO INFLOW FROM SAN JUAN RIVER WILL ALSO BE MUCH BELOW NORMAL.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY OUTLOOK WAS REDUCED SHARPLY THIS MONTH DUE TO ABOVE NORMAL TEMPERATURES AND LACK OF SNOWFALL. ALL STREAMS ON THE SOUTH PLATTE ARE EXPECTED TO FLOW LESS THAN NORMAL. CARRY-OVER RESERVOIR STORAGE IS EXCELLENT AND SHOULD PROVIDE ADEQUATE WATER SUPPLIES FOR MOST AREAS. SOIL MOISTURE IS DEFICIENT. ADDITIONAL SNOW AND/OR RAIN IS NEEDED IN VALLEYS AND MOUNTAINS DURING APRIL TO ASSURE A GOOD WATER SUPPLY THIS MONTH.

This report prepared by
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DENVER, COLORADO
DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (1)	90	90	100
Boulder at Orodell	45	92	49
Cache La Poudre at Canyon Mouth (2)	195	91	215
Clear Creek at Golden (3)	105	88	119
St. Vrain at Lyons (4)	60	86	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	81	97
Boulder	3	96	97
Cache La Poudre	6	73	96
Clear Creek	6	78	86
Saint Vrain	3	89	92
South Platte	3	117	113

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	-	- -	- -
Boulder	-	- -	- -
Cache La Poudre	-	- -	- -
Clear Creek	2	93	121
Saint Vrain	-	- -	- -
South Platte	2	114	130

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	28.0	26.2	21.1
Black Hollow	8.0	4.7	4.4	3.3
Boyd Lake	44.0	36.4	44.8	27.6
Cache La Poudre	9.5	8.0	8.0	7.5
Carter Lake	108.9	107.5	106.4	81.7
Chambers Lake	8.8	1.9	4.5	3.0
Cheesman	79.0	79.0	73.5	49.0
Cobb Lake	34.3	20.3	21.9	9.9
Eleven Mile	97.8	78.0	96.4	72.1
Fossil Creek	11.6	8.8	9.5	7.0
Gross	43.1	25.2	36.7	22.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	6.4	3.3	4.7
Horsetooth	143.5	122.9	116.5	106.8
Lake Loveland	14.3	12.2	10.9	8.4
Lone Tree	9.2	7.8	8.7	6.6
Mariano	5.4	5.2	5.4	4.2
Marshall	10.3	6.0	7.0	3.0
Marston	18.0	15.5	16.3	14.7
Milton	24.4	17.8	15.9	10.8
Standley	42.0	30.3	31.0	11.0
Terry Lake	8.2	5.8	6.4	5.0
Union	12.7	12.1	12.7	7.6
Windsor	18.6	13.7	8.7	9.9

† 1953-1967 Period

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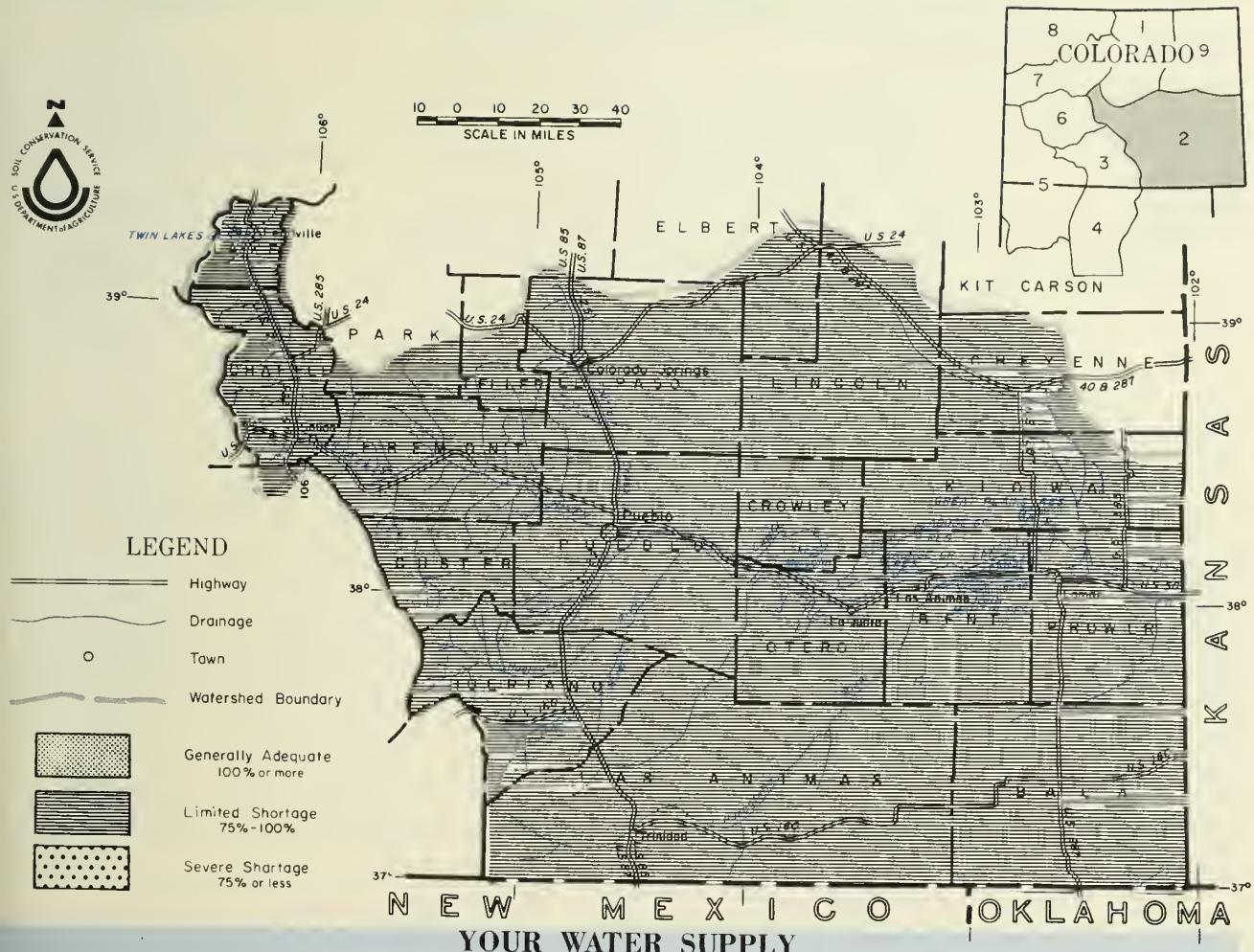
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE BEEN REDUCED SHARPLY THIS MONTH. THE SNOWPACK HAS DECREASED MORE RAPIDLY THAN USUAL BECAUSE OF WARM TEMPERATURES AND BELOW NORMAL SNOWFALL. RESERVOIR STORAGE IS ABOUT 70 PERCENT OF AVERAGE EXCLUDING TURQUOISE RESERVOIR WHICH HAS 59,000 A.F. COMPARED TO 52,400 A.F. LAST YEAR. WATER SUPPLIES WILL BE BELOW NORMAL UNLESS ABOVE AVERAGE PRECIPITATION IS RECEIVED DURING THE REMAINDER OF THE SEASON.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

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DENVER, COLORADO
LA JUNTA, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	240	81	298
Arkansas at Salida (1)	260	84	309
Cucharas nr LaVeta	10	83	12
Purgatoire at Trinidad	30	65	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Poor
Fountain Creek	Avg.	Poor
Grape	Avg.	Poor
Hardscrable Creek	Avg.	Poor
Huerfano	Avg.	Poor
Monument Creek	Avg.	Poor

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	91	94
Cucharas and Purgatoire	3	117	39

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	89	88
Cucharas and Purgatoire	1	87	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	13.3	47.5	11.1
Clear Creek	11.4	5.7	6.0	7.3
Cucharas	40.0	- -	- -	3.3
Great Plains	150.0	44.0	108.6	38.3
Horse Creek	26.9	0.0	9.8	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	25.4	34.6	89.4
Meredith	41.9	7.8	25.6	10.0
Model	15.0	- -	1.3	3.1
Turquoise	130.0	59.0	52.4	7.5
Twin Lakes	57.9	31.4	41.5	19.9

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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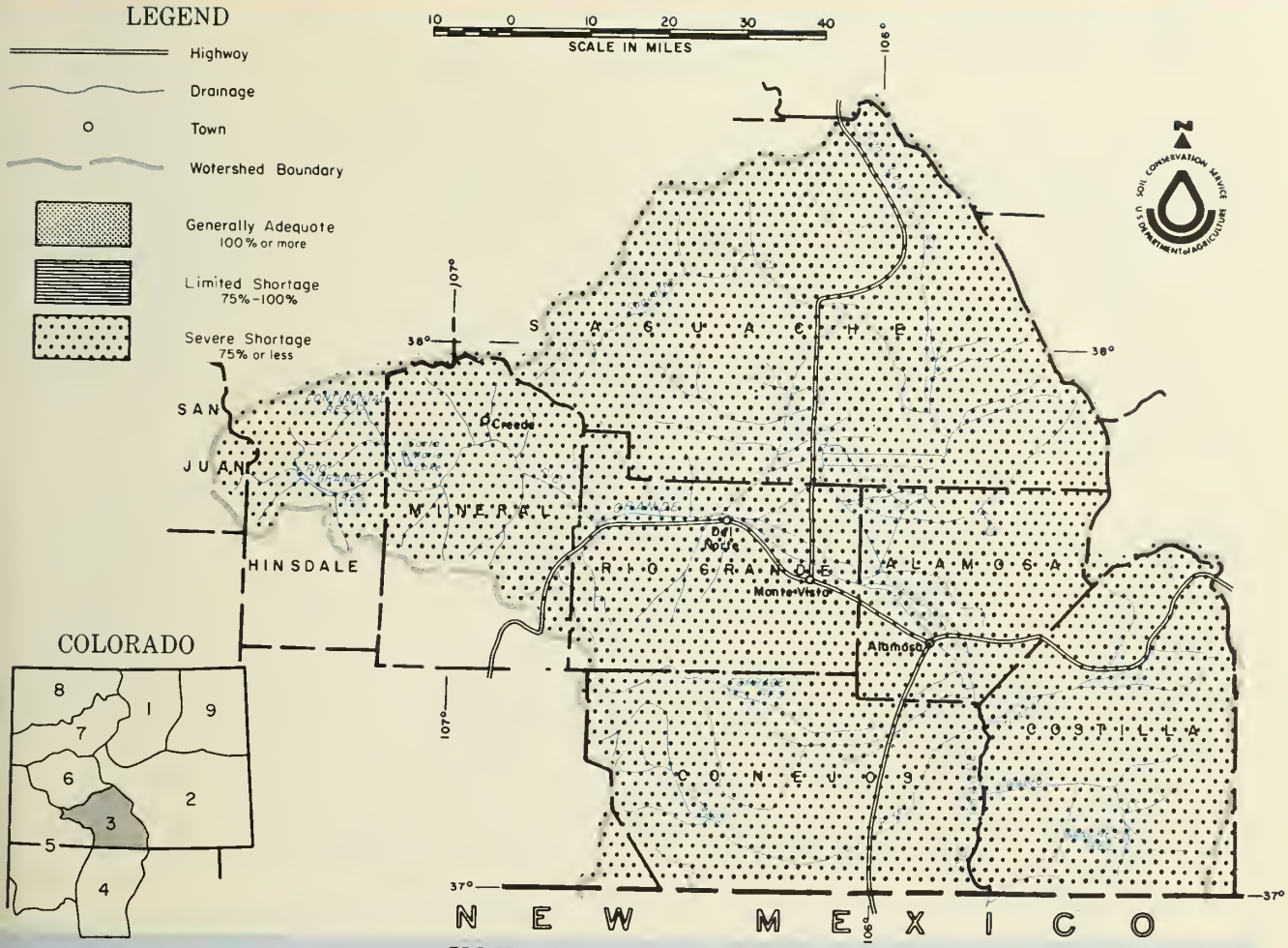

YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE BEEN DRASTICALLY REDUCED DUE TO WARM TEMPERATURES AND PRACTICALLY NO SNOW. MANY SNOW COURSES HAVE MUCH LESS SNOW THAN MARCH FIRST WHICH IS QUITE UNUSUAL. RESERVOIR STORAGE IS SLIGHTLY ABOVE NORMAL. THIS WILL SUPPLEMENT THE BELOW NORMAL FLOWS. SOILS IN THE IRRIGATED AREA OF THE BASIN ARE DRY. SNOWFALL MUST BE MUCH ABOVE NORMAL DURING APRIL OR SHORTAGES CAN BE EXPECTED.

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DURANGO, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	40	65	62
Conejos nr Mogote	120	66	182
Culebra at San Luis (2)	15	79	19
Rio Gr. at 30 Mile Bridge (3)	90	77	117
Rio Gr. nr Del Norte (3)	330	75	438
South Fork at South Fork	77	70	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera	Poor	Poor

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	105	76
Conejos	3	83	43
Culebra	2	135	62
Rio Grande	10	119	75

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	1	112	168
Conejos	1	117	90
Culebra	2	90	87
Rio Grande			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	6.2	10.0	5.1
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	18.1	41.6	13.3

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	10.0	18.0	11.1
Santa Maria	45.0	6.6	11.0	6.0
Terrace	17.7	6.3	0.0	4.0

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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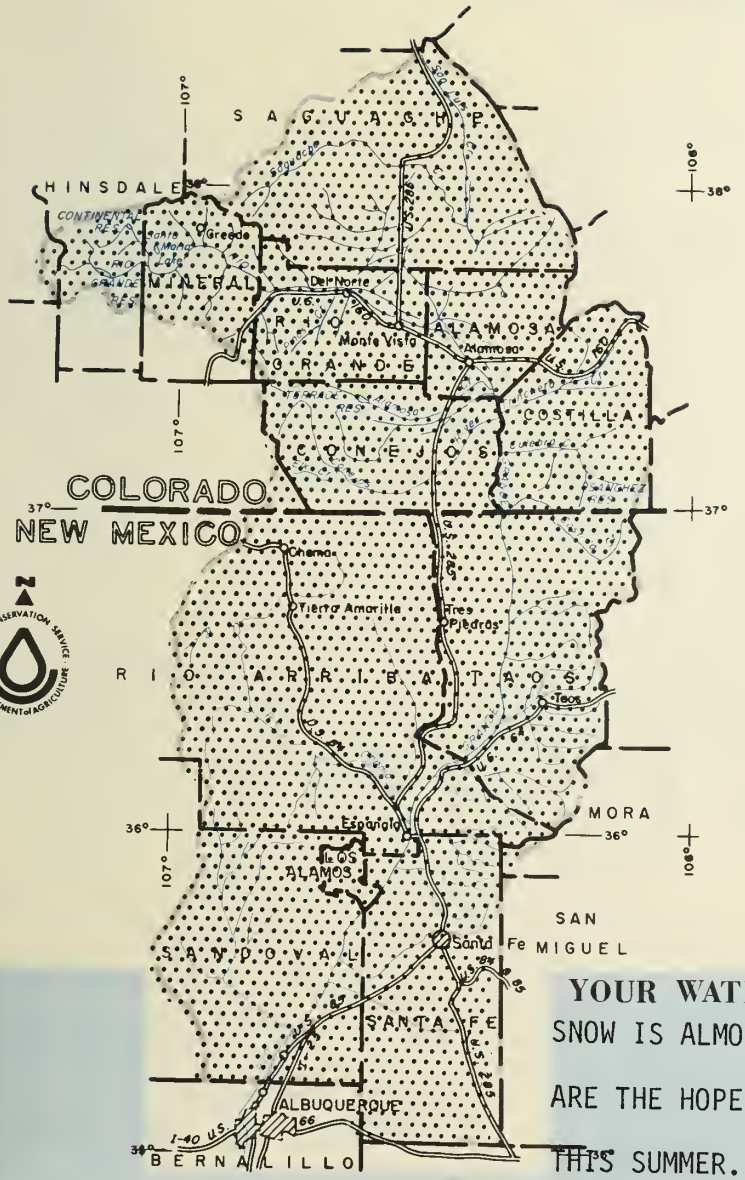

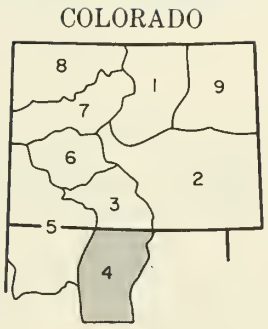

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

SNOW IS ALMOST GONE IN NEW MEXICO AND SO ARE THE HOPES FOR ADEQUATE WATER SUPPLIES THIS SUMMER. FORECASTS HAVE BEEN LOWERED FOR THE SECOND STRAIGHT MONTH. FORECASTS NOW ARE FOR 50 TO 75 PERCENT OF THE 15 YEAR AVERAGE. THIS WILL NOT PROVIDE ADEQUATE WATER TO ALL USERS. RESERVOIR STORAGE IS BELOW NORMAL. SOILS IN THE IRRIGATED AREAS ARE DRY.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	10	56	18
Pecos at Pecos	25	61	41
Rio Chama at El Vado	125	67	188
Rio Gr. at Otowi (2)	360	70	513
Rio Gr. at San Mar (2)	200	60	334
Rio Hondo nr Valdez	10	67	15
Red R. at mouth nr Questa	20	63	32

The forecast of the Rio Grande at San Marcial is 31 *% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.*

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Sante Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	0	0
Rio Chama	4	113	33
Rio Grande, N.M.	12	141	30
Rio Hondo	1	440	--
Red River	2	147	28

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	113	139
Rio Chama	2	146	131
Rio Grande	4	167	137
Red River	1	107	84

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	45	60	64
Caballo	344	35	43	65
Conchas	273	78	153	161
Elephant Butte	2195	204	317	334

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	2	1	6
McMillen-Avalon	32	9	15	22

+ 1953-1967 period.

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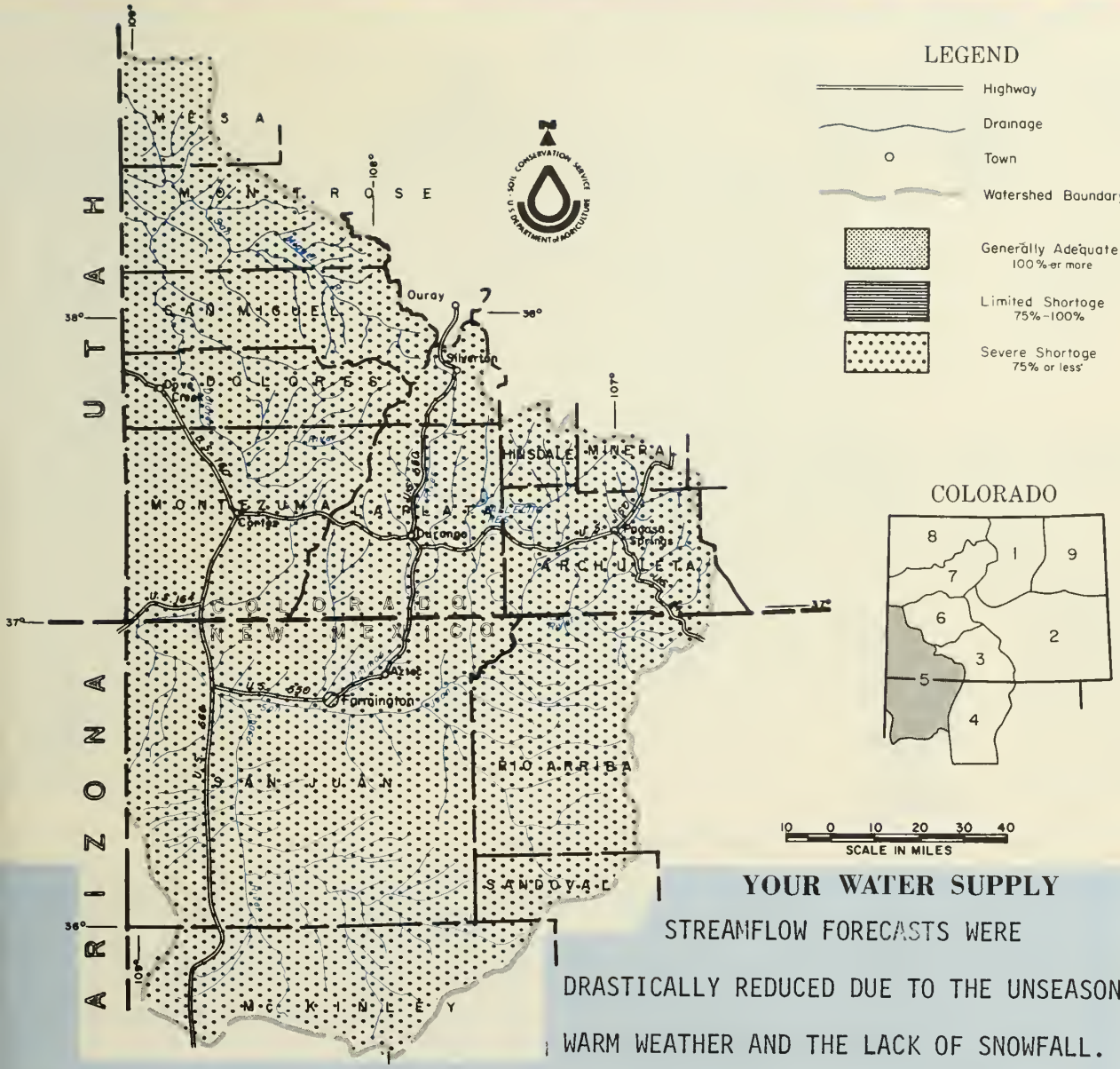
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE DRASTICALLY REDUCED DUE TO THE UNSEASONAL WARM WEATHER AND THE LACK OF SNOWFALL. SOME SNOW COURSES INDICATE A NEAR RECORD LOW PACK. MOUNTAIN AND VALLEY SOILS ARE DRY. CARRY-OVER STORAGE IS SLIGHTLY BETTER THAN AVERAGE. CONSIDERABLY MORE SNOW IS NEEDED TO PROVIDE ENOUGH WATER FOR NORMAL CROP PRODUCTION.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	300	73	409
Dolores at Dolores	150	65	231
La Plata at Hesperus	16	67	24
Los Pinos at Bayfield (1)	136	70	194
Piedra Cr. at Piedra	105	64	163
San Juan at Carracas	250	66	379
Inflow to Navajo Res. (1) (Apr-Jul)	390	63	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Poor
Mancos	Avg.	Poor
San Miguel	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	1	83	77
Dolores	4	70	54
San Juan	5	100	58

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	87	82
Dolores	2	96	97
San Juan	1	83	77

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	10	14	7
Lemon	40	22	27	15
Navajo	1696	838	834	--
Vallecito	126	60	81	50

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

April 1, 1972

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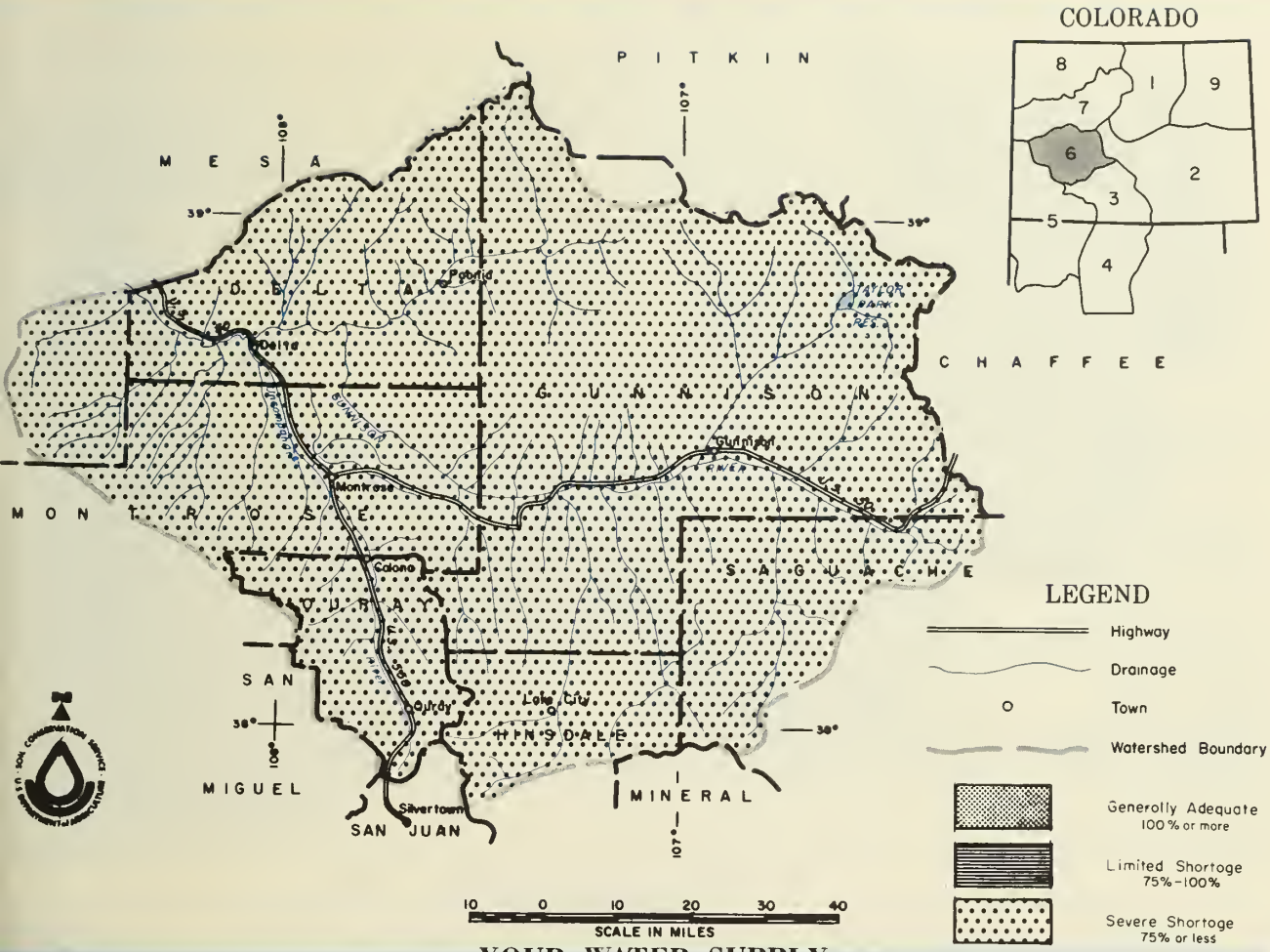
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE BEEN SHARPLY REDUCED FROM LAST MONTH ON ALL STREAMS IN THE GUNNISON BASIN. FORECAST NOW RANGE FROM 70 TO 80 PERCENT OF THE 1953-67 AVERAGE. BELOW AVERAGE SNOWFALL AND WARM TEMPERATURES COMBINED TO REDUCE THE SNOWPACK CONSIDERABLY. RESERVOIR STORAGE IN BLUE MESA AND MORROW POINT IS SLIGHTLY ABOVE LAST YEAR. WATER SUPPLIES WILL BE LIMITED UNLESS ABOVE AVERAGE PRECIPITATION OCCURS DURING THE REMAINDER OF THE SEASON.

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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Gunnison Inflow to Blue Mesa	575	75	767
Gunnison nr Grand Junction	800	70	1137
Surface Cr. nr Cedaridge	13	81	16
Uncompahgre at Colona	90	70	129

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Avg.	Fair
Taylor	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	87	84
Surface Creek	3	80	80
Uncompahgre	3	78	68

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	124	111
Surface Creek	1	74	103
Uncompahgre	1	74	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	321	306	--
Morrow Point	121	116	115	--
Taylor	106	70	92	58

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
April 1, 1972

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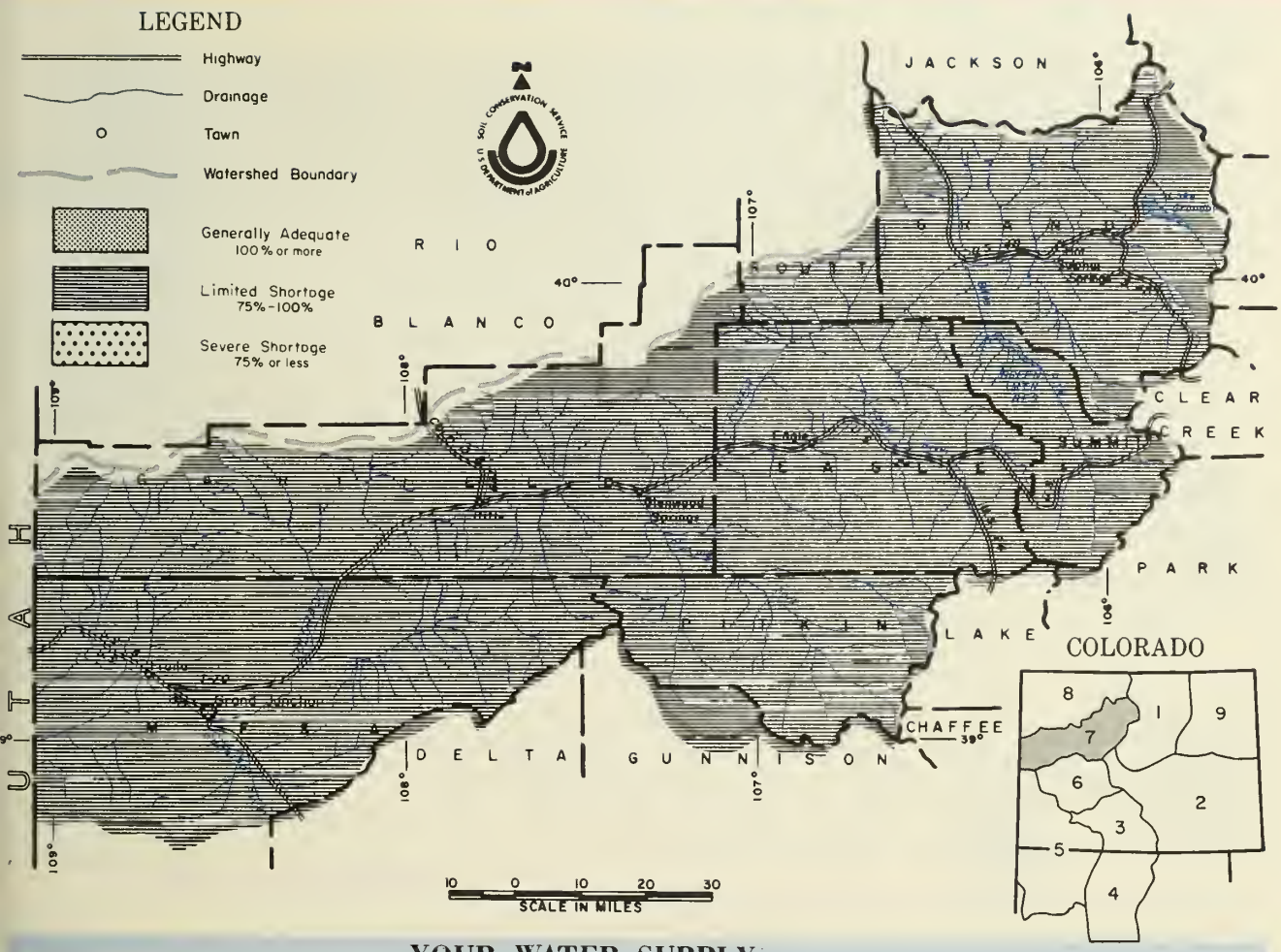
LEGEND
Highway
Drainage
Town
Watershed Boundary
Generally Adequate 100% or more
Limited Shortage 75%-100%
Severe Shortage 75% or less
JACKSON
RIO BLANCO
ROUTT
GRAND
CLEAR CREEK
SUMMIT
EAGLE
PARK
LAKE
PITKIN
CHAFFEE
DELTA
GUNNISON
MESA
Glenwood Springs
Grand Junction
Eagle
Dillon
Vail
Leadville
Aspen
Hotchkiss
Paonia
Crested Butte
Gunnison
Montrose
Ouray
Ridgway
Telluride
Lake City
Silverton
Durango
Pagosa Springs
Ignacio
Bayfield
Dolores
Rico
Cortez
Mancos
Dove Creek
Naturita
Nucla
Ophir
Rockwyman
Cedaredge
Delta

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue ab Green Mt. (1)	225	95	236
Colo. Rv. inflow to Granby Res. (2)	205	94	219
Colo. Rv. nr Dotsero (3)	1300	95	1375
Roaring Fork at Glenwood Springs (4)	600	87	692
Wm. Fk nr Par. (5)	55	92	60
Will. Cr. inflow to Will. Cr. Res	40	87	46
Colo. nr Cameo (6)	2000	90	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Fair	Avg.
Eagle River	Fair	Avg.
Gypsum Creek	Fair	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunneis plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	83	102
Colorado	21	78	103
Plateau	3	81	83
Roaring Fork	7	71	85
Williams Fork	2	77	96
Willow	2	79	92

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River.	1	84	108
Colorado	3	81	118
Roaring Fork	1	69	89
Willow	1	83	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	236	246	233
Granby	466	316	351	233
Green Mountain	147	63	55	63
Homestake	43	6	15	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	62	61	--
Williams Fork	97	52	45	27
Willow Creek	9	8	8	6
Vega	32	16	18	11

+ 1953-1967 period.

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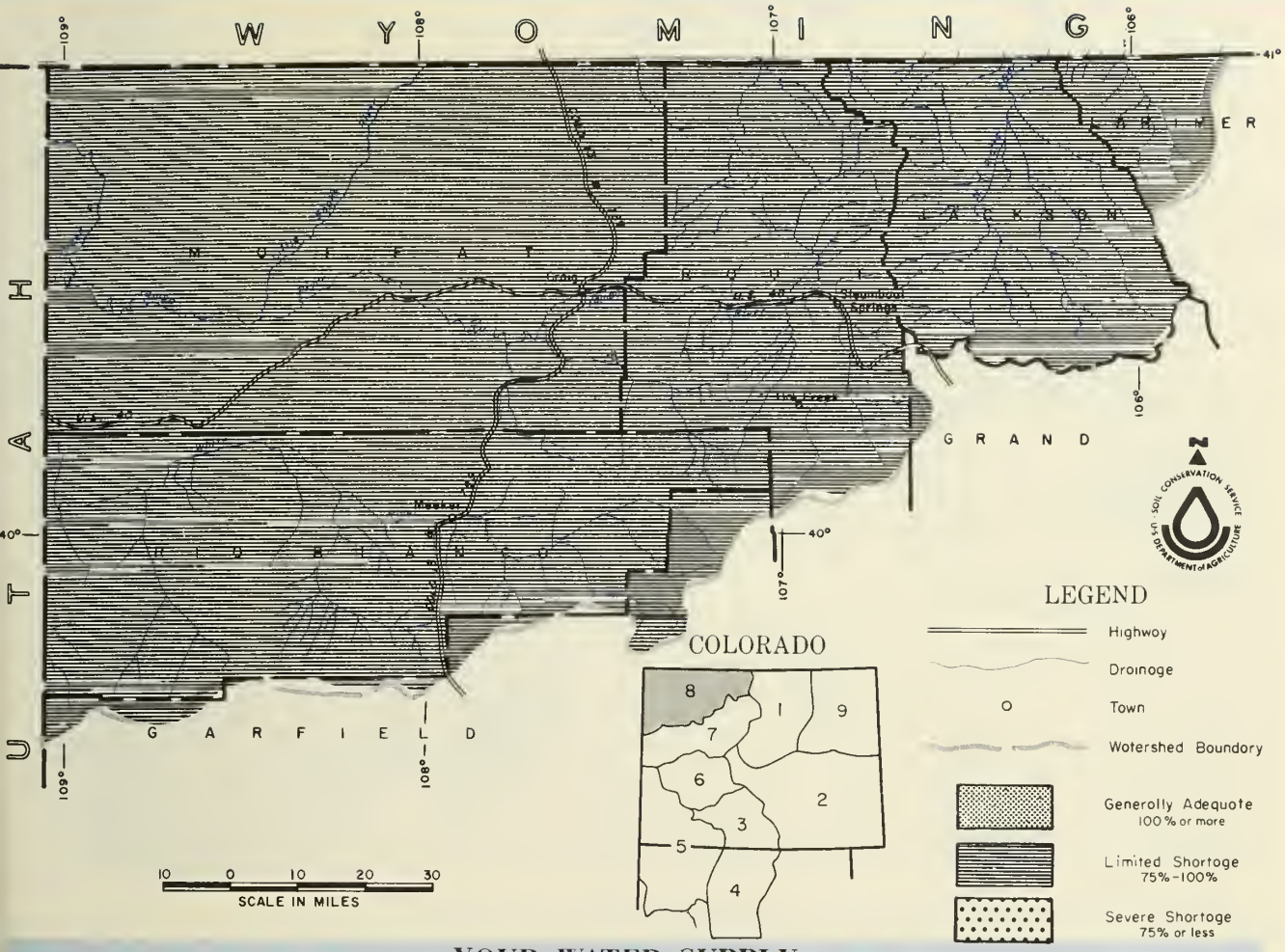
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS ARE MUCH LOWER THIS MONTH THAN LAST MONTH. FORECASTS FOR THE APRIL-SEPTEMBER PERIOD RANGE FROM 80 TO 100 PERCENT OF THE 1953-67 AVERAGE. WARM TEMPERATURES, HIGH WINDS AND LOW SNOWFALL HAS STARTED MELTING THE SNOWPACK EARLIER THAN USUAL. THE SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE ABOVE AVERAGE.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELANO
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by
M. O. BURDICK--STATE CONSERVATIONIST R.L. PORTER--AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	185	97	191
Laramie at Glendevey	56	92	61
Little Snake at Lily	277	100	277
No. Platte at Northgate	190	88	215
White nr Meeker	235	80	293
Yampa nr Maybell	800	94	853
Yampa at Steamboat Springs	240	92	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Fair
Illinois River	Avg.	Avg.
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Fair
Trout Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	3	80	95
Laramie	3	74	97
North Platte	5	69	94
White	2	65	80
Yampa	6	74	97

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	1	83	122
North Platte	2	100	131
Yampa	1	100	114

+ 1953-1967 period.

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UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE REDUCED AS MUCH AS TWENTY PERCENT ON THE SOUTH PLATTE STREAMS. THIS WAS DUE TO A CONTINUED LACK OF SNOWFALL AND ABOVE SEASONAL TEMPERATURES. IF APRIL SNOWFALL IS AT LEAST AVERAGE, WATER SUPPLIES SHOULD STILL BE ADEQUATE. CARRY-OVER STORAGE IS 122 PERCENT OF NORMAL AND WILL PROVIDE AN EXCELLENT SUPPLEMENT. SOILS ALONG THE PLATTE ARE GENERALLY DRY. SMALLER STREAMS IN THE AREAS SHOULD HAVE FAIRLY GOOD EARLY FLOWS.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELANO
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DENVER, COLORADO
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	90	90	100
Boulder at Orodell	45	92	49
Cache La Poudre at Canyon Mouth (2)	195	91	215
Clear Cr. at Golden (3)	105	88	119
Saint Vrain at Lyons (4)	60	86	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Avg.	Avg.
South Platte from Fort Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	81	97
Boulder	3	96	97
Cache La Poudre	6	73	96
Clear Creek	6	78	86
Saint Vrain	3	89	92
South Platte	3	117	113

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	-	- -	- -
Boulder	-	- -	- -
Cache La Poudre	-	- -	- -
Clear Creek	2	93	121
Saint Vrain	-	- -	- -
South Platte	2	114	130

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	107.5	106.4	81.7
Cheesman	79.0	79.0	73.5	49.0
Eleven Mile	97.8	78.0	96.4	72.1
Empire	37.7	32.8	32.8	29.6
Horsetooth	143.5	122.9	116.5	106.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	34.2	33.2	34.0
Julesburg	28.2	22.7	19.8	21.5
Prewitt	32.8	27.5	27.7	16.8
Point of Rocks	70.0	69.5	69.2	58.4
Riverside	57.5	59.0	61.9	49.6

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1972

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/30	46	15.2	20.7	16.3
McIntyre	3/28	31	11.1	13.4	10.5
Roach	3/28	54	17.3	24.8	18.2
North Platte River					
Cameron Pass	3/27	69	28.4	38.6	26.5
Columbine Lodge	3/29	60	24.2	31.2	23.5
Northgate	3/27	8	2.5	7.9	6.2
Park View	3/28	25	7.2	11.8	8.6
Willow Cr. Pass(B)	3/28	33	10.5	15.4	12.5
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/29	15	5.2	7.1	5.9
Boulder Falls	3/29	43	14.3	14.2	13.3
University Camp	3/29	58	19.3	19.1	20.7
Big Thompson River					
Deer Ridge	4/2	6	1.3	4.7	5.0
Hidden Valley	4/3	30	9.0	10.6	11.0
Lake Irene (B)	3/26	56	20.2	27.3	20.7
Long's Peak	3/31	41	12.3	13.2	10.7
Two Mile	4/2	58	17.3	18.7	14.5
Cache La Poudre					
Bennett Creek	3/28	23	4.7	8.9	- -
Big South	3/29	1	0.2	0.5	2.4
Cameron Pass	3/27	69	28.4	38.6	26.5
Chambers Lake	3/29	19	7.4	12.1	9.1
Deadman Hill	3/30	46	15.2	20.7	16.3
Hour Glass Lake	3/28	22	6.1	7.7	6.8
Joe Wright	3/27	65	22.4	29.3	- -
Lost Lake	3/29	32	12.6	16.0	11.5
Pine Creek	3/30	6	0.3	0.7	1.9
Red Feather	3/30	20	4.9	7.9	7.2
Clear Creek					
Baltimore (B)	3/29	15	5.2	7.1	5.9
Berthoud Falls	3/29	42	13.7	16.3	12.9
Empire	3/29	19	6.3	8.5	7.5
Grizzly Peak (B)	3/29	58	18.4	23.9	17.9
Loveland Lift	3/30	44	11.6	16.5	23.4
Loveland Pass	3/30	49	16.2	19.0	15.4
Saint Vrain River					
Copeland Lake	4/2	10	3.2	5.5	4.4
Ward	3/30	19	4.6	6.6	6.7
Wild Basin	4/2	40	13.3	11.7	11.8
South Platte River					
Como	3/29	29	7.4	6.5	- -
Geneva Park	3/29	19	4.8	2.7	3.5
Horseshoe Mt.	3/28	51	13.7	11.5	- -
Hoosier Pass	3/30	48	14.3	11.6	12.9
Jefferson Creek	3/29	35	10.2	10.3	9.2
Mosquito	3/29	35	10.2	8.7	- -
Trout Creek Pass	3/28	19	4.3	2.2	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/29	19	2.3	7.3	5.8
Cooper Hill (B)	4/1	48	11.9	12.2	10.6
East Fork	3/30	29	8.9	10.3	9.6
Four Mile Park	3/30	15	3.6	4.7	4.4
Fremont Pass	3/30	54	15.8	19.4	16.1
Garfield	3/29	41	12.6	12.4	13.2
Hermit Lake	3/30	15	2.4	5.4	- -
Monarch Pass	3/29	50	16.0	16.3	17.3
Tennessee Pass	3/30	41	10.6	10.0	10.1
Twin Lakes Tunnel	3/30	41	12.6	10.3	10.7
Westcliffe	3/30	14	2.8	3.3	5.4

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES) LAST YEAR	PAST RECORD: WATER CONTEN (INCHES) AVG 53 67
Cucharas River					
Blue Lakes	3/31	7	0.6	0.0	2.9
Cucharas Pass	3/31	7	1.2	3.9	- -
LaVeta Pass (B)	3/31	10	2.6	2.4	7.3
Purgatorie River					
Bourbon	3/30	14	3.4	3.4	7.1
RIO GRANDE BASIN-COLO.					
Alamosa River					
Silver Lakes	3/29	1	0.1	0.0	5.5
Summitville	3/28	61	17.8	17.0	18.1
Conejos River					
Cumbres	3/30	22	8.0	10.3	18.6
LaManga	3/30	35	11.9	- -	- -
Platoro	3/30	27	9.0	8.5	16.6
River Springs	3/31	0	0.0	1.6	4.8
Culebra River					
Brown Cabin	3/29	6	1.5	0.0	- -
Cottonwood (B)	NS			4.8	- -
Culebra	3/30	25	7.1	4.8	8.4
LaVeta Pass (B)	3/31	10	2.6	2.4	7.3
Trinchera (B)	3/29	24	7.6	- -	- -
Rio Grande					
Cochetopa Pass	3/28	28	6.3	6.0	5.1
Grayback	3/31	32	10.1	11.4	- -
Hiway	3/29	56	18.6	17.9	26.0
Lake Humphrey	3/28	14	3.7	3.2	5.5
Love Lake	3/30	24	8.0	3.3	- -
Pass Creek	3/29	14	4.4	3.9	11.1
Pool Table	3/30	21	5.4	1.7	5.9
Porcupine	3/31	37	11.0	6.4	10.1
Santa Maria	3/30	2	0.3	0.5	3.7
Upper Rio Grande	3/31	19	6.0	4.2	6.8
Wolf Creek Pass	3/29	43	16.5	15.7	27.0
Wolf Cr. Sum. (B)	3/29	69	24.7	21.6	28.3
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	3/29	0	0.0	0.0	1.3
Rio Chama					
Bateman	3/29	22	6.7	6.4	11.4
Capulin Peak	3/29	0	0.0	0.0	4.0
Chama Divide	3/29	0	0.0	0.0	1.4
Chamita	3/29	4	1.3	0.7	7.5
Rio Grande					
Aspen Grove	3/29	3	1.1	0.5	3.7
Big Tesuque	3/30	0	0.0	0.0	4.2
Blue Bird Mesa	3/28	1	0.1	0.0	3.6
Cordova	3/30	24	6.4	5.1	10.0
Elk Cabin	3/30	0	0.0	0.0	2.1
Fenton Hill	3/30	1	0.2	0.0	2.7
Hopewell	3/29	22	7.8	- -	- -
Pajarito Peak	3/30	0	0.0	0.0	0.3
Payrole	3/31	4	1.5	1.2	6.2
Quemazon	3/30	15	5.2	2.8	8.2
Rio En Medio	3/30	4	1.5	2.8	7.7
Sandoval	3/30	0	0.0	0.0	4.5
Taos Canyon	3/29	6	1.1	0.0	3.5
Tres Ritos	3/29	3	0.5	0.0	4.2
Rio Hondo					
Twinning	3/31	16	4.4	1.0	- -
Red River					
Hematite Park (B)	3/30	4	0.6	0.0	3.5
Red River	3/30	7	1.9	1.7	5.5

NOTE: NS - No Survey
(B) - On Adjacent Drainage

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SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	4/3	9	3.6	4.2	10.8
Lemon	3/31	0	0.0	1.0	- -
Mineral Creek	4/3	31	11.5	12.5	13.3
Molas Lake	4/3	13	4.5	9.7	12.6
Purgatory	4/3	43	16.7	12.0	- -
Red Mt. Pass (B)	4/3	79	29.5	29.1	30.1
Silverton Sub-Sta.	4/3	0	0.0	2.4	5.1
Spud Mountain	4/3	42	17.4	16.4	23.1
Dolores River					
Lizzard Head	3/30	32	12.4	13.2	16.0
Lone Cone	3/29	31	10.7	13.4	- -
Rico	3/30	0	0.0	0.0	5.4
Telluride	3/30	7	1.6	5.6	5.7
Trout Lake	3/30	22	7.7	12.4	13.2
San Juan River					
Chama Divide (B)	3/29	0	0.0	0.0	1.4
Chamita (B)	3/29	4	1.3	0.7	7.5
Upper San Juan	3/29	36	12.6	17.5	30.8
Wolf Cr. Pass (B)	3/29	43	16.5	15.7	27.0
Wolf Cr. Summit	3/29	69	24.7	21.6	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/30	50	18.7	21.3	21.4
Blue Mesa	3/30	13	3.2	5.1	7.9
Butte	3/30	43	13.4	14.7	- -
Cochetopa Pass (B)	3/28	28	6.3	6.0	5.1
Crested Butte	3/30	30	11.2	9.7	13.3
Keystone	3/29	47	17.9	20.4	19.7
Lake City	3/28	26	7.2	7.2	7.7
Mesa Lakes (B)	3/28	38	11.6	17.5	17.5
McClure Pass	3/29	28	10.0	15.3	14.6
Park Cone	3/29	38	10.4	9.1	10.9
Park Reservoir	3/30	57	19.8	23.6	23.6
Porphyry Creek	3/29	50	14.4	16.6	16.9
Tomichi	3/29	38	12.7	12.9	12.2
Surface Creek					
Alexander Lake	3/30	50	18.7	21.3	21.4
Mesa Lakes (B)	3/28	38	11.6	17.5	17.5
Park Reservoir	3/30	57	19.8	23.6	23.6
Uncompahgre River					
Ironton Park	3/29	20	5.3	11.7	17.9
Red Mountain Pass	4/3	79	29.5	29.1	30.1
Telluride (B)	3/30	7	1.6	5.6	5.7
COLORADO BASIN					
Blue River					
Blue River	3/30	32	8.7	8.6	8.5
Fremont Pass	3/30	54	15.8	19.4	16.1
Frisco	3/29	24	6.8	8.8	7.5
Grizzly Peak	3/29	58	18.4	23.9	17.9
Hoosier Pass (B)	3/30	48	14.3	11.6	12.9
Shrine Pass	3/29	60	18.8	23.6	17.4
Snake River	3/29	19	5.4	10.9	7.6
Summit Ranch	3/29	28	8.4	9.3	7.1

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Colorado River					
Arrow	3/30	41	14.5	18.7	11.8
Berthoud Pass	3/31	54	19.3	21.6	14.5
Berthoud Summit	3/29	60	19.0	21.4	19.3
Cooper Hill	4/1	48	11.9	12.2	10.6
Fiddler Gulch	3/30	50	12.4	15.0	15.1
Glenmar Ranch	3/28	24	7.5	10.3	7.9
Gore Pass	3/29	33	10.3	12.5	10.0
Grand Lake	3/26	26	8.0	9.3	8.2
Lake Irene	3/26	56	20.2	27.3	20.7
Lapland	3/28	36	12.4	15.9	9.9
Lulu	3/28	59	19.5	25.9	17.0
Lynx Pass	3/29	37	11.8	16.2	12.0
McKenzie Gulch	3/29	17	4.8	5.7	- -
Middle Fork	3/28	30	8.8	13.0	9.1
Milner	3/26	35	12.1	17.4	13.3
North Inlet	3/26	27	7.4	10.3	8.7
Pando	3/30	29	10.2	11.3	10.4
Phantom Valley	3/26	20	7.3	13.9	10.4
Ranch Creek	3/30	34	10.2	14.5	9.4
Tennessee Pass(B)	3/30	41	10.6	10.0	10.1
Vail Pass	3/29	49	17.3	22.5	17.1
Vasquez	3/31	50	15.1	18.3	12.4
Roaring Fork River					
Aspen	3/28	51	16.7	24.9	16.4
Chapman	3/29	52	17.2	18.1	- -
Independence Pass	3/30	50	15.1	20.2	17.7
Ivanhoe	3/30	58	18.9	23.0	17.9
Kiln	3/30	48	14.5	15.2	- -
Last Chance	3/30	43	13.5	13.3	- -
Lift	3/28	49	14.4	20.7	19.0
McClure Pass	3/29	28	10.0	15.3	14.6
Nast	3/30	17	4.9	7.8	5.3
North Lost Trail	3/29	28	9.7	15.2	14.1
Williams Fork River					
Glenmar Ranch	3/28	24	7.5	10.3	7.9
Jones Pass	3/28	47	15.3	22.3	- -
Middle Fork	3/28	30	8.8	13.0	9.1
Willow Creek					
Granby	3/28	26	7.8	7.7	7.5
Willow Cr. Pass	3/28	33	10.5	15.4	12.5
Plateau Creek					
Mesa Lakes	3/28	38	11.6	17.5	17.5
Park Reservoir	3/30	57	19.8	23.6	23.6
Trickle Divide	3/30	64	23.5	27.0	25.2
YAMPA BASIN					
Elk River					
Clark	3/30	26	9.1	9.0	10.0
Elk River	3/30	46	16.3	22.7	16.8
Hahn's Peak	3/30	34	12.3	15.7	12.9
White River					
Burro Mountain	3/30	37	12.7	22.6	17.0
Rio Blanco	3/29	38	13.5	17.5	15.8
Yampa River					
Bear River	3/27	37	10.4	13.4	11.1
Columbine (B)	3/29	60	24.2	31.2	23.5
Dry Lake	3/28	55	19.0	22.4	19.9
Lynx Pass (B)	3/29	37	11.8	16.2	12.0
Rabbit Ears	3/30	76	25.4	35.7	25.7
Yampa View	3/30	36	12.0	19.8	14.3

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	3/30/72	11.1	8.9	7.3	6.4
Willow Pass	3/28/72	9.5	7.7	9.3	6.3
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	NS	6.9	- -	4.1	3.4
Big Thompson River					
Beaver Dam	NS	7.1	- -	4.1	3.3
Guard Station	NS	6.9	- -	- -	3.6
Two Mile	NS	4.9	- -	4.7	2.6
Clear Creek					
Clear Creek	3/30/72	9.5	6.5	6.6	5.0
Hoop Creek	3/30/72	4.9	2.7	3.3	2.6
Cache La Poudre River					
Feather	NS	10.1	- -	5.3	4.0
Laramie Road	NS	12.4	- -	7.9	6.8
South Platte River					
Hoosier Pass	3/30/72	7.8	4.8	4.3	4.3
Kenosha Pass	3/29/72	4.4	3.4	2.9	2.0
ARKANSAS BASIN					
Arkansas River					
Garfield	3/29/72	6.7	3.9	4.6	3.5
Leadville	3/30/72	7.8	3.1	3.2	3.7
Twin Lakes Tunnel	3/30/72	4.5	1.5	1.8	2.5
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	3/31/72	10.7	5.4	4.6	6.0
Rio Grande					
Bristol View	3/30/72	6.1	5.7	5.1	3.4
LaVeta Pass	3/31/72	11.9	7.6	8.7	8.7
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	3/29/72	6.7	4.4	1.9	3.2
Chamita	3/29/72	8.0	5.2	4.7	4.1
Rio Grande					
Aqua Piedra	3/29/72	7.2	4.8	3.9	3.7
Big Tesuque	3/31/72	3.7	2.6	0.9	1.9
Rio En Medio	3/31/72	3.5	2.4	0.4	1.2
Taos Canyon	3/29/72	3.3	2.7	2.3	2.3
Red River					
Red Summit	3/30/72	4.9	1.6	1.5	1.9

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	4/3/72	9.1	5.3	6.4	6.9
Mineral Creek	4/3/72	5.7	3.1	4.1	3.5
Molas Lake	4/3/72	9.4	3.7	3.4	4.4
Dolores River					
Dolores	NS	19.6	- -	8.4	8.0
Lizzard Head	3/30/72	11.8	4.4	5.0	7.1
Rico	3/30/72	13.8	10.5	10.5	8.3
GUNNISON BASIN					
Gunnison River					
King	3/29/72	3.3	2.1	1.7	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	3/30/72	4.2	2.6	3.1	2.4
Colorado River					
Berthoud Pass	3/29/72	3.9	2.5	3.1	2.5
Gore	3/29/72	4.9	3.1	3.5	2.6
Grand Mesa	3/30/72	12.5	9.3	12.5	9.0
Ranch Creek	3/30/72	8.7	5.0	5.9	5.3
Vail	3/29/72	12.3	9.0	10.5	6.5
Roaring Fork River					
Placita	3/28/72	9.3	5.8	8.4	6.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	3/30/72	13.1	13.0	13.0	11.4

ALL PROFILES 4 FEET DEEP

USDA SCS PORTLAND OREG 1967 MTL 1964

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- National Weather Service

War Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

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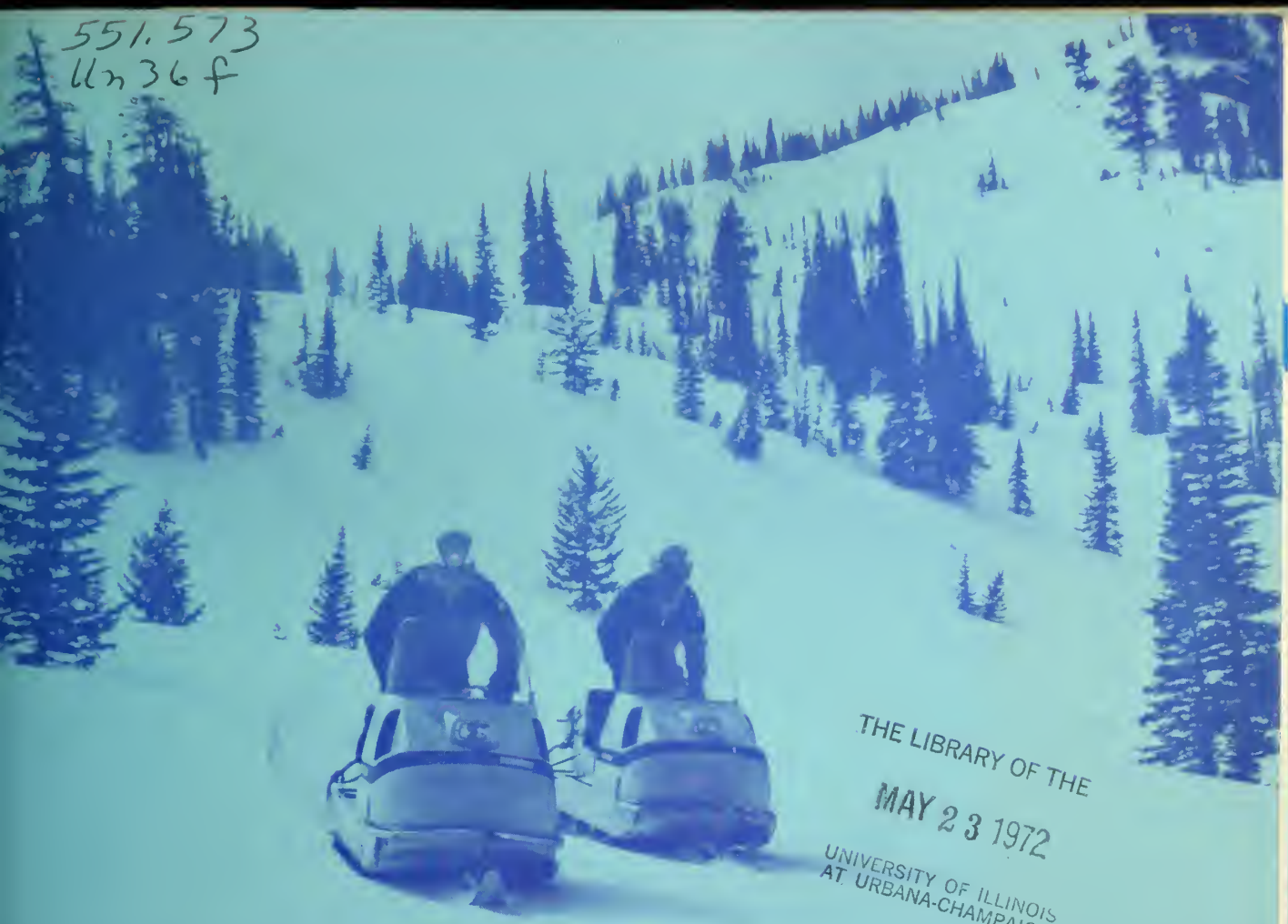

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
MAY 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS PORTLAND, OREG 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

May 1, 1972

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of

May 1, 1972

THE SNOWPACK RANGES FROM NEAR NORMAL IN THE NORTHERN PARTS OF COLORADO TO ONLY ABOUT FIFTY PERCENT IN SOUTHERN COLORADO AND NORTHERN NEW MEXICO. LOW ELEVATION SNOW IS NEARLY GONE IN BOTH STATES. RESERVOIR STORAGE IS EXCELLENT IN THE SOUTH PLATTE DRAINAGE. OTHER BASINS IN COLORADO HAVE LESS THAN NORMAL STORAGE. SOIL MOISTURE CONDITIONS IN THE TWO STATES ARE GENERALLY POOR, HOWEVER, MONTH-END SNOW STORM NEAR DENVER HELPED IN A FEW AREAS.

COLORADO -- NONE OF THE STATE'S STREAMS WILL FLOW NORMAL OR ABOVE THIS SUMMER. THE NORTHERN THIRD SHOULD HAVE AT LEAST ADEQUATE SUPPLIES WHILE THE SOUTHERN THIRD WILL BE CONSIDERABLY SHORT OF WATER. SOME SNOW COURSES ARE NEAR A MINIMUM OF RECORD IN THE RIO GRANDE AND SAN JUAN BASIN. WARM WEATHER HAS PRACTICALLY ELIMINATED THE LOW ELEVATION SNOWPACK. SUMMER RAINS ARE BADLY NEEDED IN SOUTHERN COLORADO.

NEW MEXICO -- SNOWFALL HAS BEEN VERY DEFICIENT SINCE JANUARY OVER ALL OF NEW MEXICO. WARM TEMPERATURES REDUCED THE SNOWPACK EVEN FARTHER. SNOW MELT WATER SUPPLIES WILL BE VERY DEFICIENT THIS SUMMER. MOST OF THE STATE'S STREAMS ARE EXPECTED TO FLOW LESS THAN 50 PERCENT. CARRY-OVER STORAGE IS ALSO POOR. REPORTS LIST SOIL MOISTURE AS FAIR TO POOR.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of
May 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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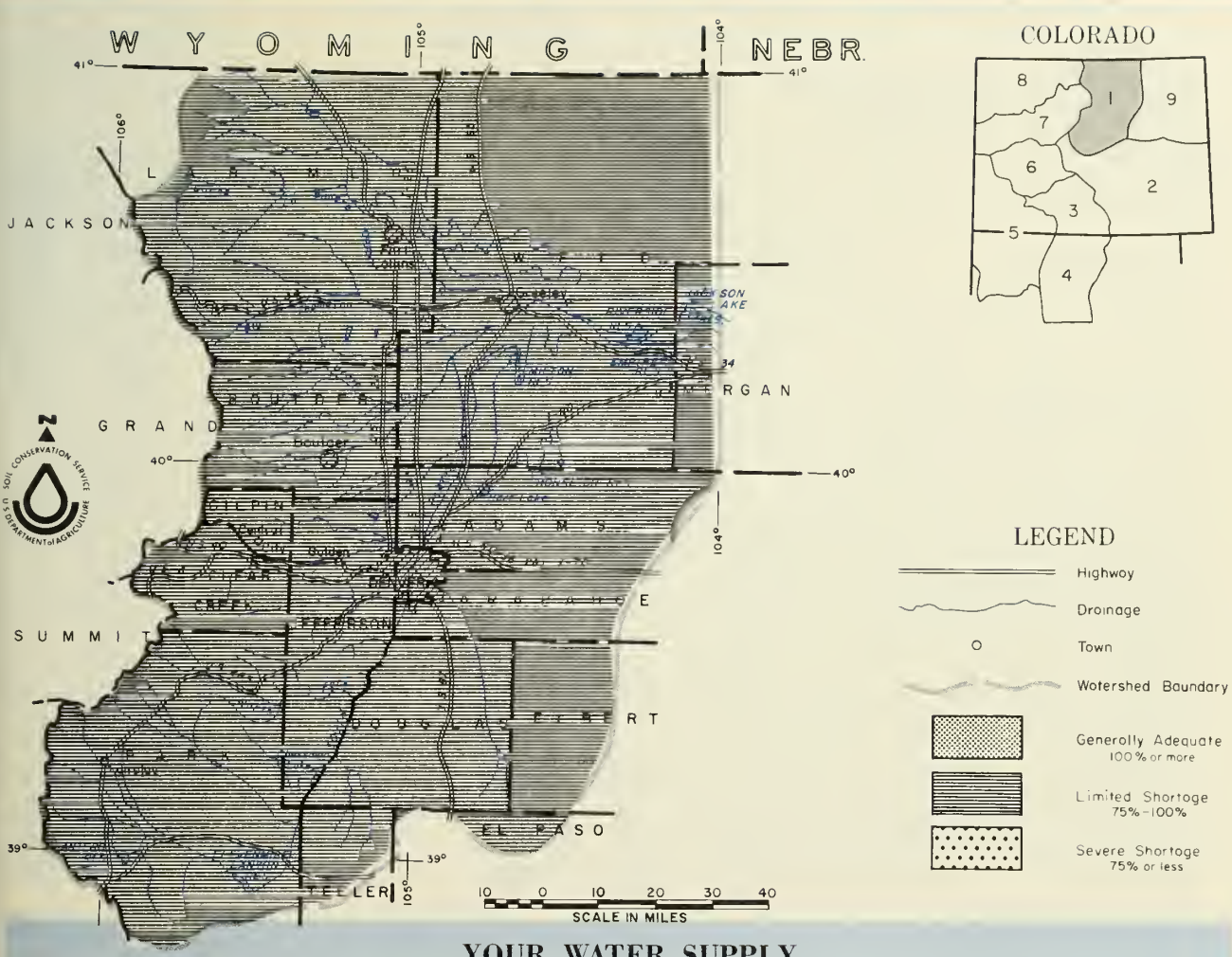

YOUR WATER SUPPLY

END OF THE MONTH SNOW STORM ADDED SOME MUCH NEEDED WATER TO THE SOUTH PLATTE BASIN. THE STORM WAS SPOTTY, BUT KEPT THE SNOWPACK NEAR NORMAL. WATER SUPPLIES SHOULD BE GENERALLY ADEQUATE THIS SUMMER. FORECASTS ARE NEAR NORMAL, CARRY-OVER STORAGE IS GOOD AND VALLEY SOILS ARE IN RELATIVELY GOOD CONDITION.

This report prepared by
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Issued by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (1)	90	90	100
Boulder at Orodell	45	92	49
Cache La Poudre at Canyon Mouth (2)	210	98	215
Clear Cr. at Golden(3)	105	88	119
St. Vrain at Lyons (4)	60	86	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Avg.
Coal Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Avg.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	75	98
Boulder	3	64	83
Cache La Poudre	8	75	118
Clear Creek	6	74	83
Saint Vrain	3	36	81
South Platte	3	89	123

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	2	98	98
Boulder	1	113	140
Cache La Poudre	2	89	107
Clear Creek	2	80	110
Saint Vrain	2	109	127
South Platte	2	85	101

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	26.8	29.0	23.0
Black Hollow	8.0	4.8	4.3	3.5
Boyd Lake	44.0	36.4	45.4	27.7
Cache La Poudre	9.5	8.2	9.5	8.0
Carter Lake	108.9	107.2	109.0	86.4
Chambers Lake	8.8	2.3	4.9	3.3
Cheesman	79.0	74.0	77.7	50.2
Cobb Lake	34.0	20.1	21.9	9.8
Eleven Mile	97.8	81.0	96.4	72.9
Fossil Creek	11.6	8.1	10.3	7.0
Gross	43.1	18.3	34.1	17.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average
Halligan	6.4	4.3	6.4	5.
Horsetooth	143.5	134.0	128.4	116.
Lake Loveland	14.3	12.2	12.7	9.
Lone Tree	9.2	8.0	8.8	7.
Mariano	5.4	5.2	5.5	2.
Marshall	10.3	6.5	9.4	4.
Marston	18.0	14.7	16.7	15.
Milton	24.4	18.1	16.3	11.
Standley	42.0	31.1	34.8	11.
Terry Lake	8.2	5.9	7.1	5.
Union	12.7	12.1	12.7	8.
Windsor	18.6	13.6	11.7	14.

† 1953-1967 peri

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

May 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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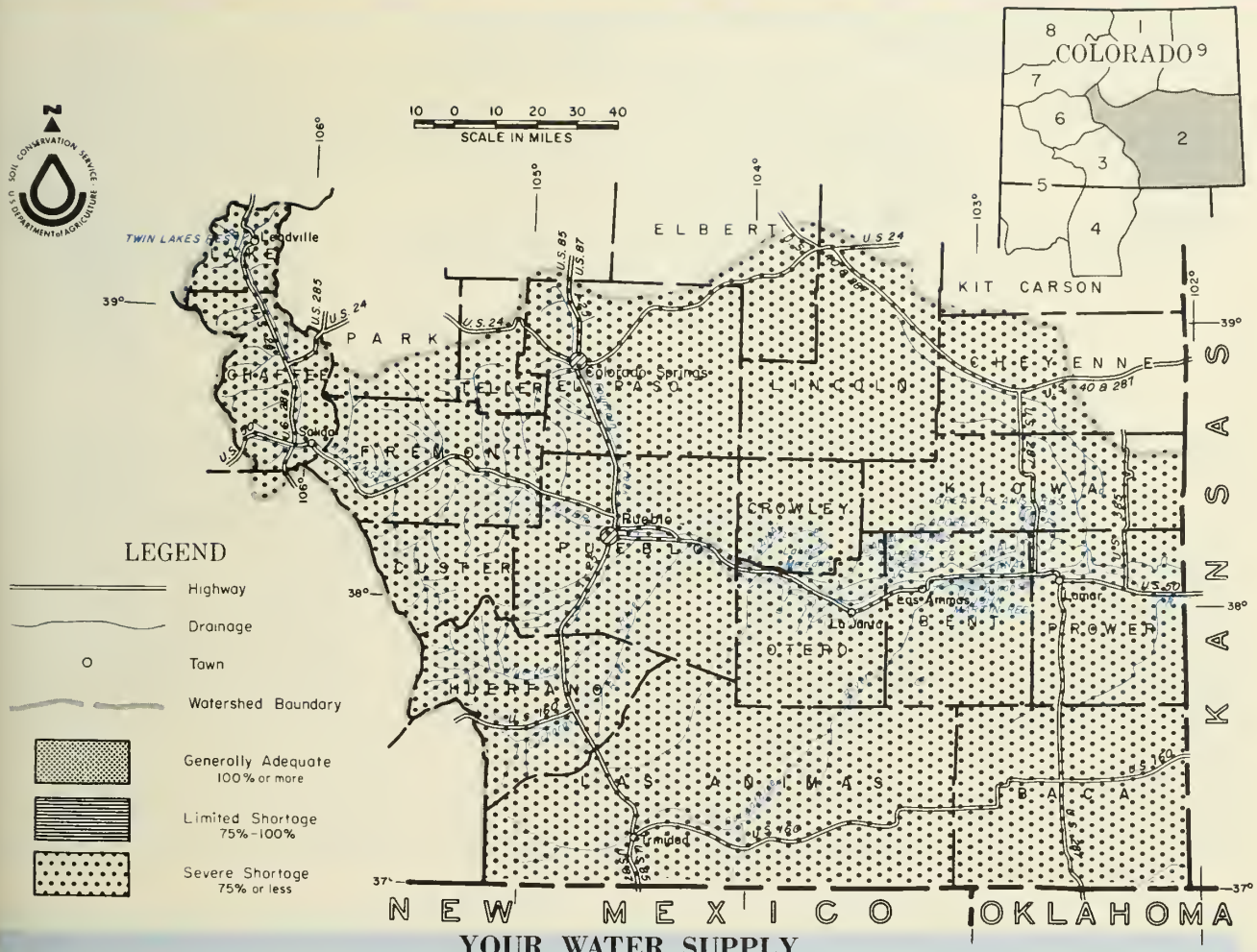

YOUR WATER SUPPLY

WATER SUPPLIES WILL BE MUCH BELOW AVERAGE THIS YEAR. WARM TEMPERATURES AND BELOW AVERAGE SNOWFALL CONTINUES TO DIMINISH THE SNOWPACK, ESPECIALLY AT LOWER ELEVATIONS AND SOUTH-FACING SLOPES. FORECASTS NOW RANGE FROM 60% ON THE PURGATOIRE TO 76% ON THE ARKANSAS RIVER AT SALIDA. TURQUOISE RESERVOIR CONTAINS 56,300 A.F. COMPARED TO 51,300 A.F. LAST YEAR. JOHN MARTIN RESERVOIR IS EMPTY. RESERVOIR STORAGE IN THE SMALLER RESERVOIRS IS ABOUT 98% OF AVERAGE.

This report prepared by
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DENVER, COLORADO

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
LA JUNTA, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	200	67	298
Arkansas nr Salida (1)	235	76	309
Cucharas nr La Veta	8	67	12
Purgatorie at Trinidad	28	60	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Poor	Poor
Fountain Creek	Poor	Poor
Grape	Poor	Poor
Hardscrable	Poor	Poor
Huerfano	Poor	Poor
Monument Creek	Poor	Poor

(1) Observed flou plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Divide, Twin Lakes and Homestak Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	93	92
Cucharas and Purgatoire	3	0	0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	88	76
Cucharas and Purgatoire	1	86	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	12.1	45.4	10.6
Clear Creek	11.4	5.0	6.0	6.4
Cucharas	40.0	0.0	- -	4.8
Great Plains	150.0	45.4	102.2	35.9
Horse Creek	26.9	0.0	9.0	4.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	0.0	2.6	67.9
Meredith	41.9	7.2	24.2	9.3
Model	15.0	0.9	0.0	2.4
Turquoise	130.0	56.3	51.3	6.2
Twin Lakes	57.9	19.2	27.1	17.7

+ 1953-1967 period.

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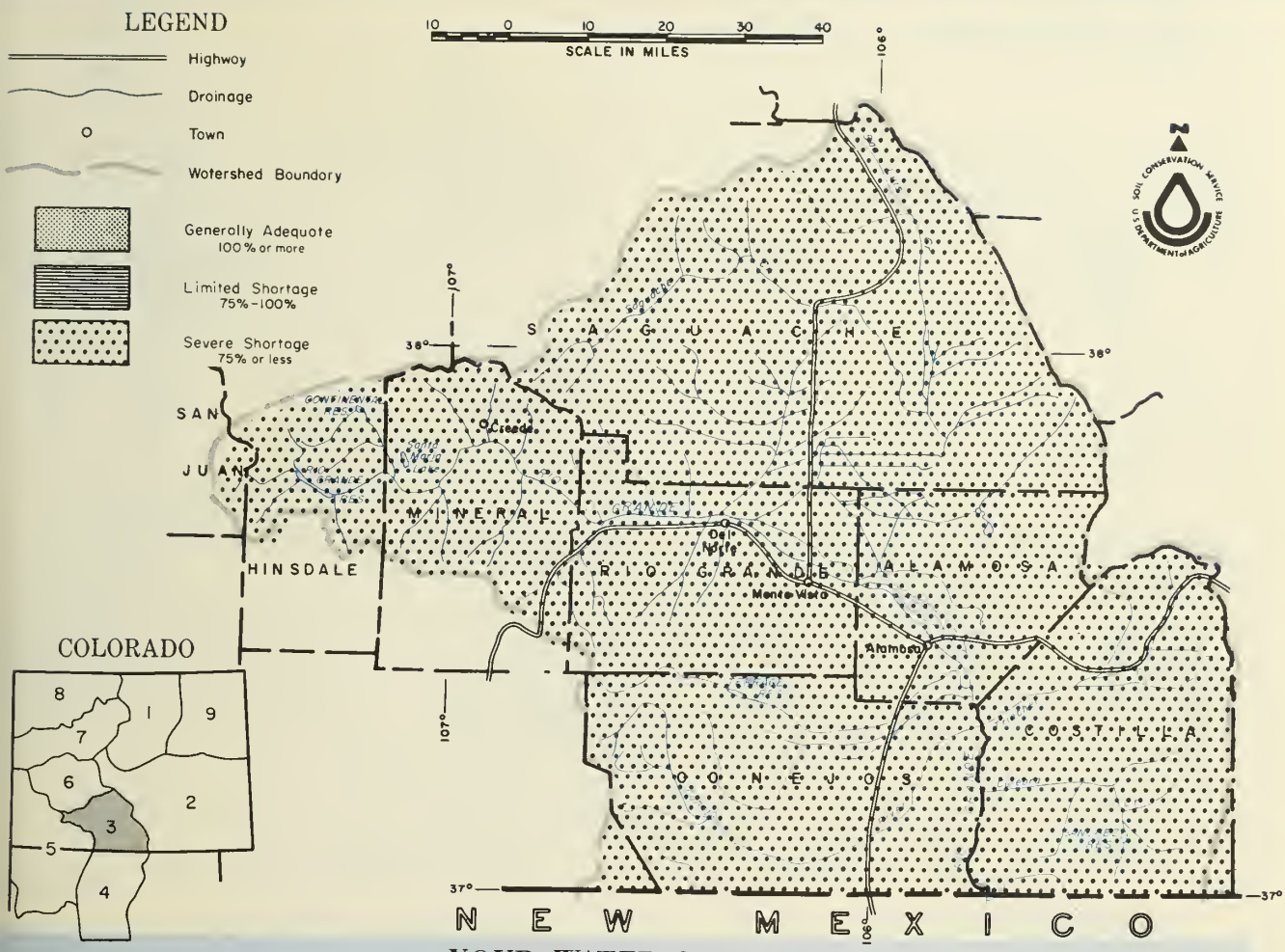
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

May 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES WILL BE CONSIDERABLY BELOW AVERAGE THIS SUMMER. FORECASTS NOW RANGE FROM 60 TO 70%. THE FORECASTS ARE SLIGHTLY BELOW LAST MONTH'S BECAUSE OF THE CONTINUING WARM TEMPERATURES AND SMALL AMOUNTS OF PRECIPITATION. ONLY THE HIGH ELEVATION SNOW COURSES HAVE SNOW REMAINING. RESERVOIR STORAGE IS SLIGHTLY BELOW NORMAL AND SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS DRY.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELANO
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DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Alamosa abv Terrace	38	61	62
Conejos nr Mogote (1)	110	60	182
Culebra at San Luis (2)	12	63	19
Rio Grande at 30 Mile Bridge (3)	85	73	117
Rio Grande nr Del Norte (3)	300	68	438
South Fork at South Fork	70	64	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Poor	Poor
Sangre de Cristo Cr.	Poor	Poor
Trinchera	Poor	Poor

(1) Observed flow plus change in storage in Platoro Reservair. (2) Observed flaw plus change in storage in Sanchez Reservair. (3) Observed flow plus change storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	102	85
Conejos	3	24	7
Culebra	2	0	0
Rio Grande	10	99	60

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	98	126
Conejos	1	93	77
Culebra	1	86	87
Rio Grande	2	90	98

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	26.7	6.2	9.6	5.8
Platoro	60.0	4.4	2.9	8.1
Rio Grande	45.8	18.0	42.0	15.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103.2	7.3	17.5	12.3
Santa Maria	45.0	6.6	11.2	6.9
Terrace	17.7	6.7	2.0	5.7

† 1953-1967 period

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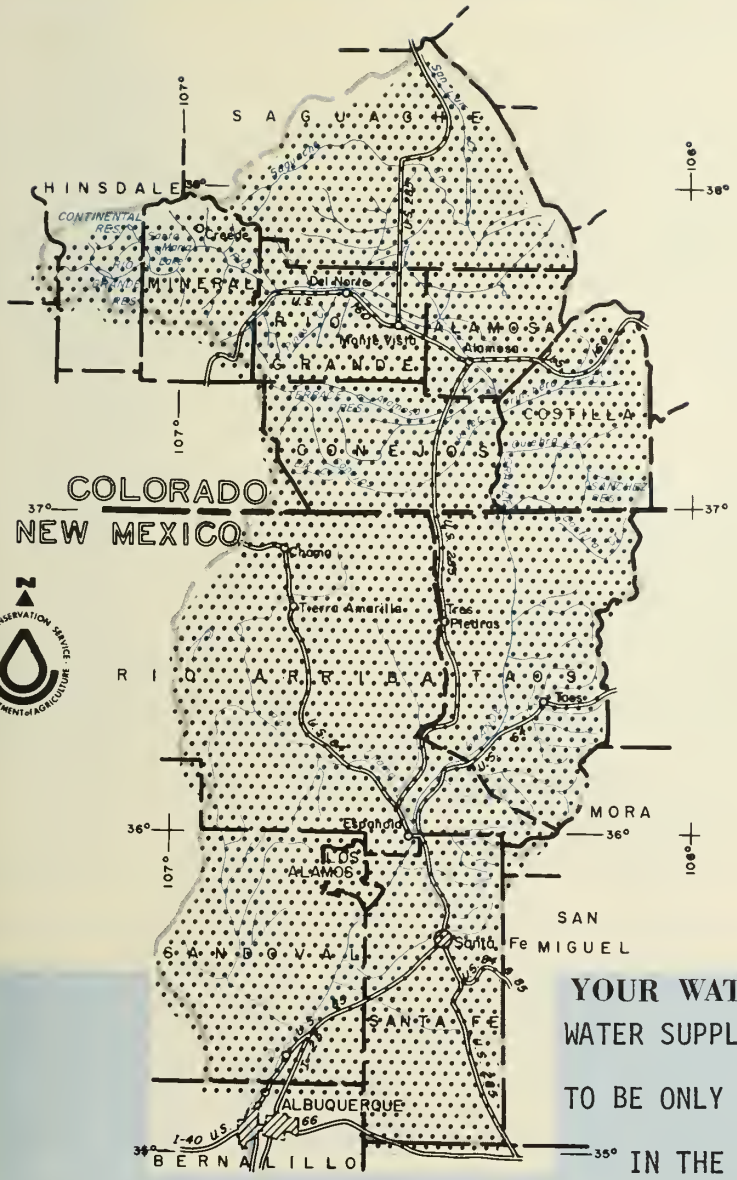
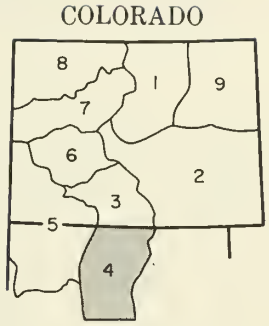
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of
May 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

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SCALE IN MILES

YOUR WATER SUPPLY

WATER SUPPLIES FROM STREAMFLOW IS EXPECTED TO BE ONLY ABOUT 50% OF NORMAL THIS SUMMER IN THE RIO GRANDE VALLEY. SNOW IS PRACTICALLY GONE EXCEPT AT THE VERY HIGH ELEVATIONS. CARRY-OVER STORAGE IS LESS THAN LAST YEAR AND ONLY ABOUT 50% OF THE 15-YEAR AVERAGE. BOTH THE CANADIAN AND PECOS DRAINAGE WILL HAVE DEFICIENT WATER SUPPLIES. SOILS ARE DRY.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	10	56	18
Pecos at Pecos	22	54	41
Rio Chama at El Vado	120	64	188
Rio Grande at Otowi(2)	260	51	513
Rio Grande at San Mar. (2)	120	36	334
Rio Hondo nr Valdez	8	53	15
Red River at Mouth nr Questa	20	63	32

The forecast of the Rio Grande at San Marcial is 19 % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Poor	Poor
Jemez River	Poor	Poor
Mora River	Poor	Poor
Nambe Creek	Poor	Poor
Rio Ojo Caliante	Poor	Poor
Rio Pueblo de Taos	Poor	Poor
Santa Fe Creek	Poor	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
No snow measurements scheduled this month.			

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
No soil moisture readings scheduled this month.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	4	33	64
Caballo	344	41	57	75
Conchas	273	68	130	150
Elephant Butte	2195	172	291	322

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	8	21	31
McMillen-Avalon	32	20	12	12

+ 1953-1967 period.

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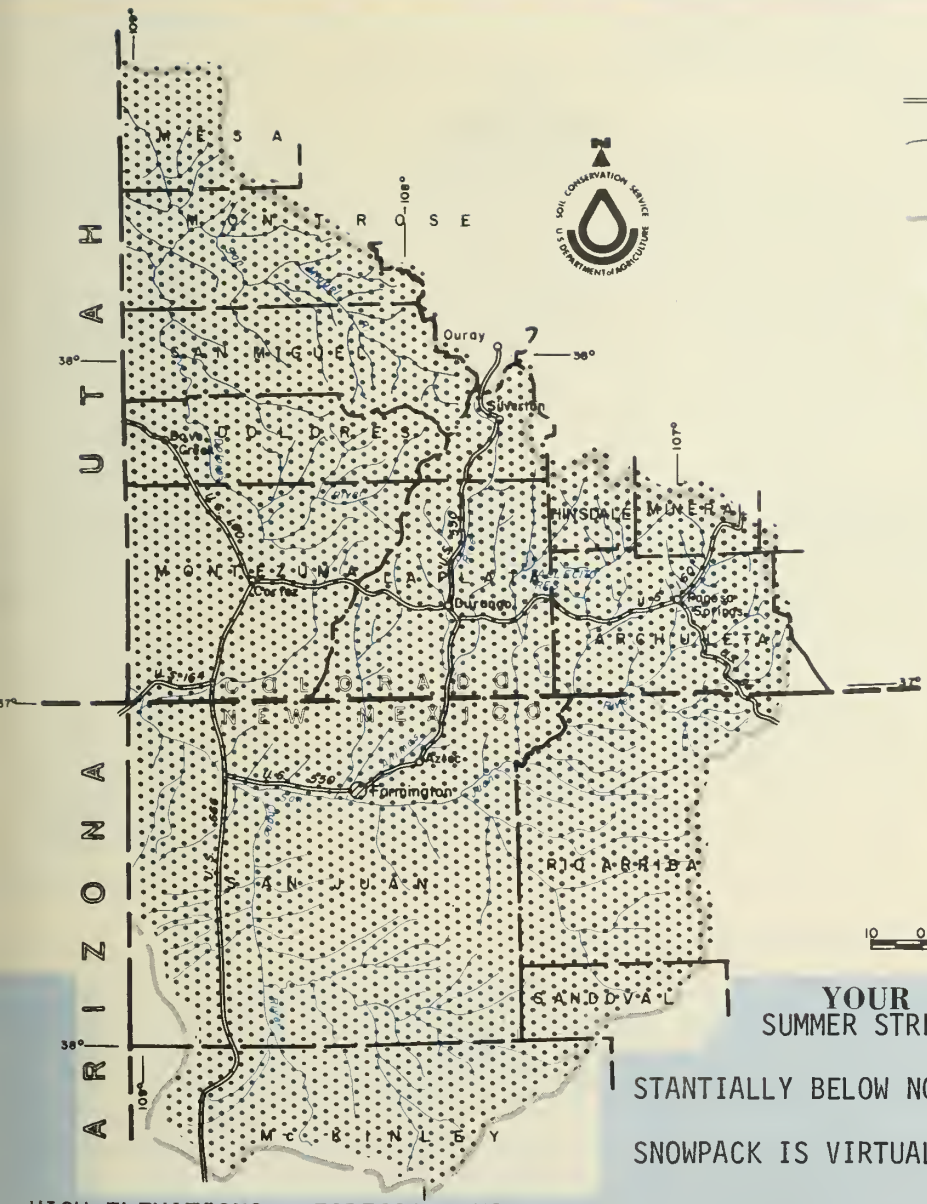
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
May 1, 1972

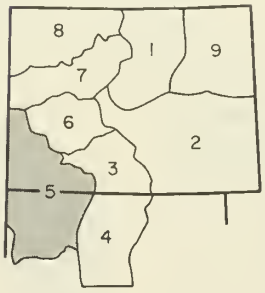
U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

SUMMER STREAMFLOW WILL BE SUBSTANTIALLY BELOW NORMAL THIS YEAR. THE SNOWPACK IS VIRTUALLY GONE EXCEPT AT THE HIGH ELEVATIONS. FORECASTS HAVE DROPPED EACH MONTH SINCE FEBRUARY. CARRY-OVER STORAGE IS SIMILAR TO LAST YEAR AND SLIGHTLY ABOVE NORMAL. SOIL MOISTURE CONDITIONS AROUND DURANGO ARE POOR, HOWEVER, CORTEZ REPORTS GOOD MOISTURE.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Animas at Durango	250	61	409
Dolores at Dolores	150	65	231
La Plata at Hesperus	14	58	24
Los Pinos at Bayfield (1)	125	64	194
Piedra Cr. at Piedra	100	61	163
San Juan at Carracas	250	66	379
Inflow to Navajo Res. (1) (Apr-Jul)	360	58	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Fair	Poor
Mancos	Fair	Poor
San Miguel	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Animas	6	82	60
Dolores	4	29	15
San Juan	3	102	52

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Animas	3	97	82
Dolores	3	77	61
San Juan	1	93	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Groundhog	22	12	19	9
Lemon	40	26	31	19
Navajo	1696	847	869	326
Vallecito	126	79	95	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average

† 1953-1967 perio

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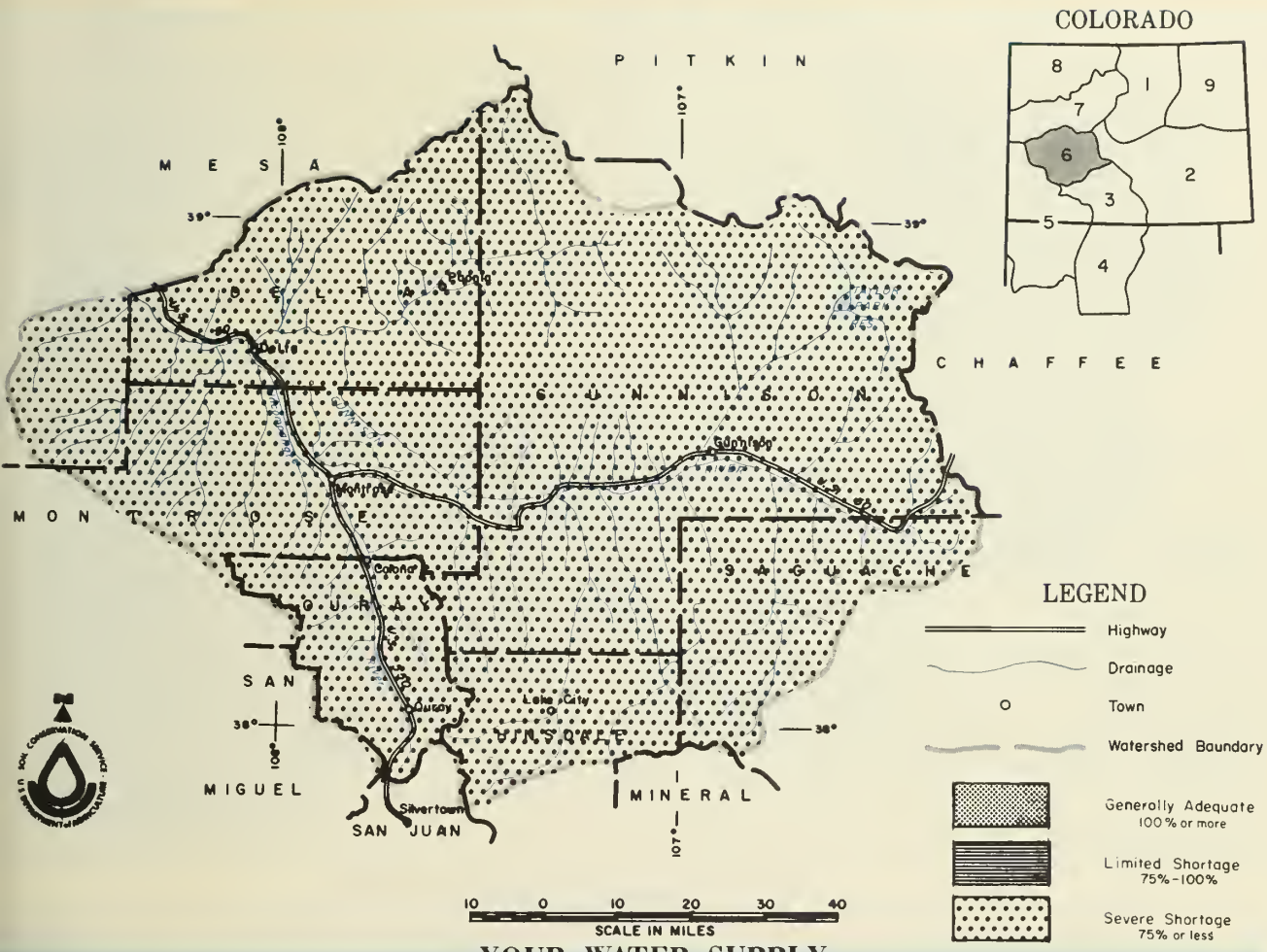
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWPACK HAS CONTINUED TO DIMINISH IN THIS BASIN BECAUSE OF WARM TEMPERATURES AND BELOW AVERAGE PRECIPITATION. STREAMFLOW FORECASTS ARE SLIGHTLY LOWER THAN LAST MONTH AND ARE NOW 62% ON THE GUNNISON AND UNCOMPAHGRE RIVERS. RESERVOIR STORAGE IN TAYLOR PARK IS 77,000 A.F., OR 131% OF AVERAGE. BLUE MESA IS 319,000 A.F. COMPARED TO LAST YEAR'S 374,000 A.F. ABOVE AVERAGE PRECIPITATION IS NEEDED TO PROVIDE AN ADEQUATE WATER SUPPLY THIS SUMMER.

This report prepared by

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison Rv. Inflow to Blue Mesa	500	65	767
Gunnison nr Grand Junction (1)	700	62	1137
Surface Creek nr Cedaridge	13	81	16
Uncompahgre at Colona	80	62	129

(1) Observed flow plus change in storage in Taylor, Blue Mesa and Morrow Point Reservoirs.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Fair	Poor
Taylor	Fair	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	67	59
Surface Creek	3	68	64
Uncompahgre	3	85	75

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	100	100
Surface Creek	1	97	122
Uncompahgre	1	97	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	319	374	- -
Morrow Point	121	116	115	- -
Taylor	106	77	84	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
May 1, 1972

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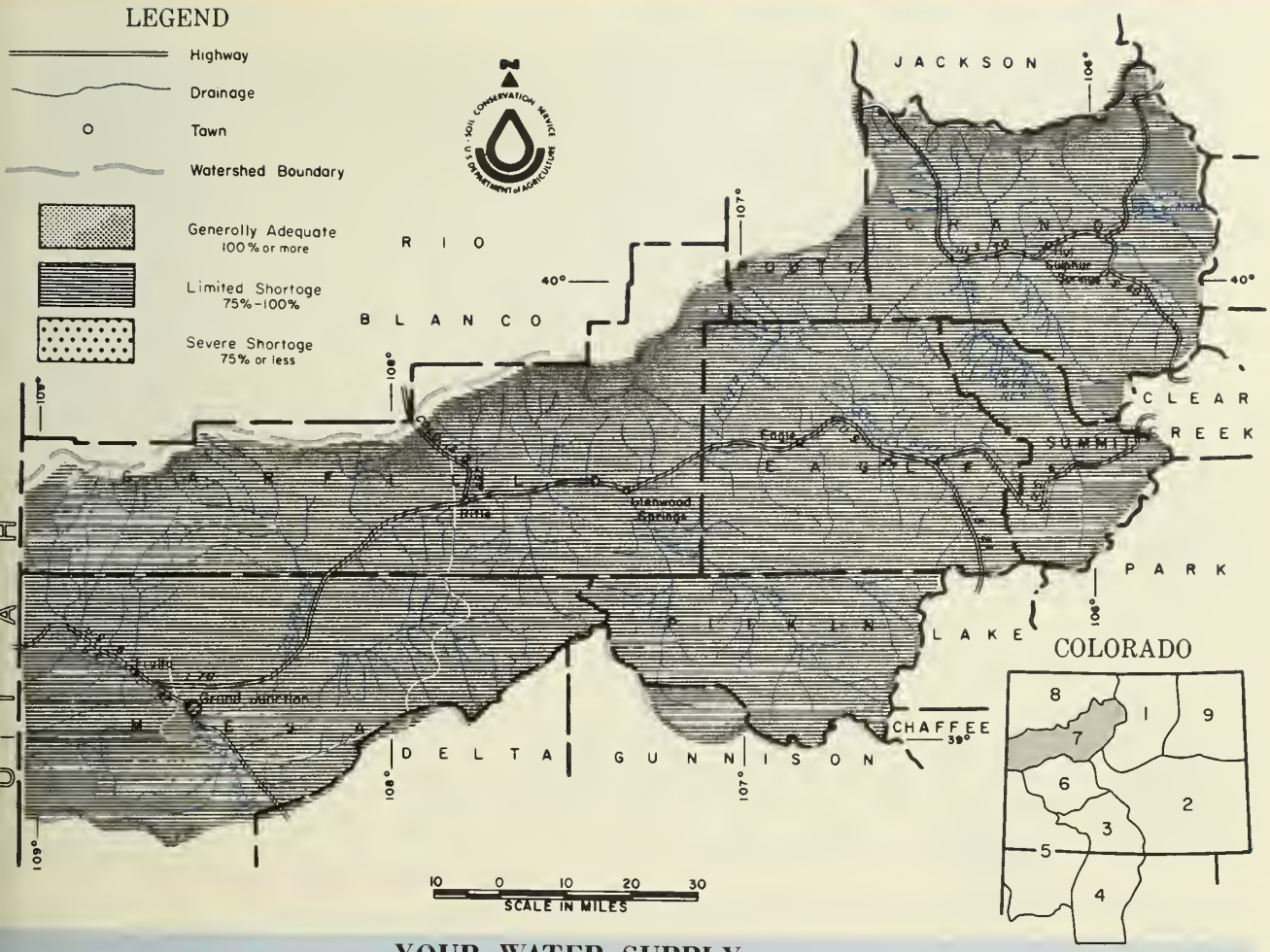
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY FORECASTS CONTINUED TO DROP THIS MONTH. FORECASTS NOW RANGE FROM 70% ON THE ROARING FORK RIVER TO 93% ON THE BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR. THE COLORADO RIVER NEAR CAMEO IS FORECAST AT 83%. THE McCLURE PASS SNOW COURSE HAS NO SNOW, THE SAME AS IN 1954 AND 1963. RESERVOIR STORAGE IS ABOVE AVERAGE IN ALL RESERVOIRS AND WILL SUPPLEMENT THE SUMMER FLOWS. ABOVE AVERAGE PRECIPITATION IS NEEDED TO INSURE AVERAGE STREAMFLOW THIS SUMMER.

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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue abv Green Mt. (1)	220	93	236
Colo. Rv. inflow to Granby Res. (2)	195	89	219
Colo. Rv. nr Dotsero (3)	1200	87	1375
Roaring Fork at Glenwood Springs (4)	485	70	692
Williams Fork nr Par. (5)	55	92	60
Willow Creek inflow to Willow Cr. Reservoir	35	76	46
Colo. nr Cameo (6)	1850	83	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Fair	Fair
Eagle River	Fair	Fair
Gypsum Creek	Fair	Fair

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granb as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Dite and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus chan in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	94	103
Colorado	21	71	99
Plateau	3	73	68
Roaring Fork	7	85	91
Williams Fork	3	66	89
Willow	2	62	76

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	81	97
Colorado	5	96	103
Roaring Fork	1	98	105
Willow	1	104	134

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	236	246	233
Granby	466	319	351	205
Green Mountain	147	51	48	43
Homestake	43	3	11	- -

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	61	50	--
Vega	32	18	25	13
Williams Fork	97	56	53	34
Willow Creek	9	7	3	--

+ 1953-1967 period.

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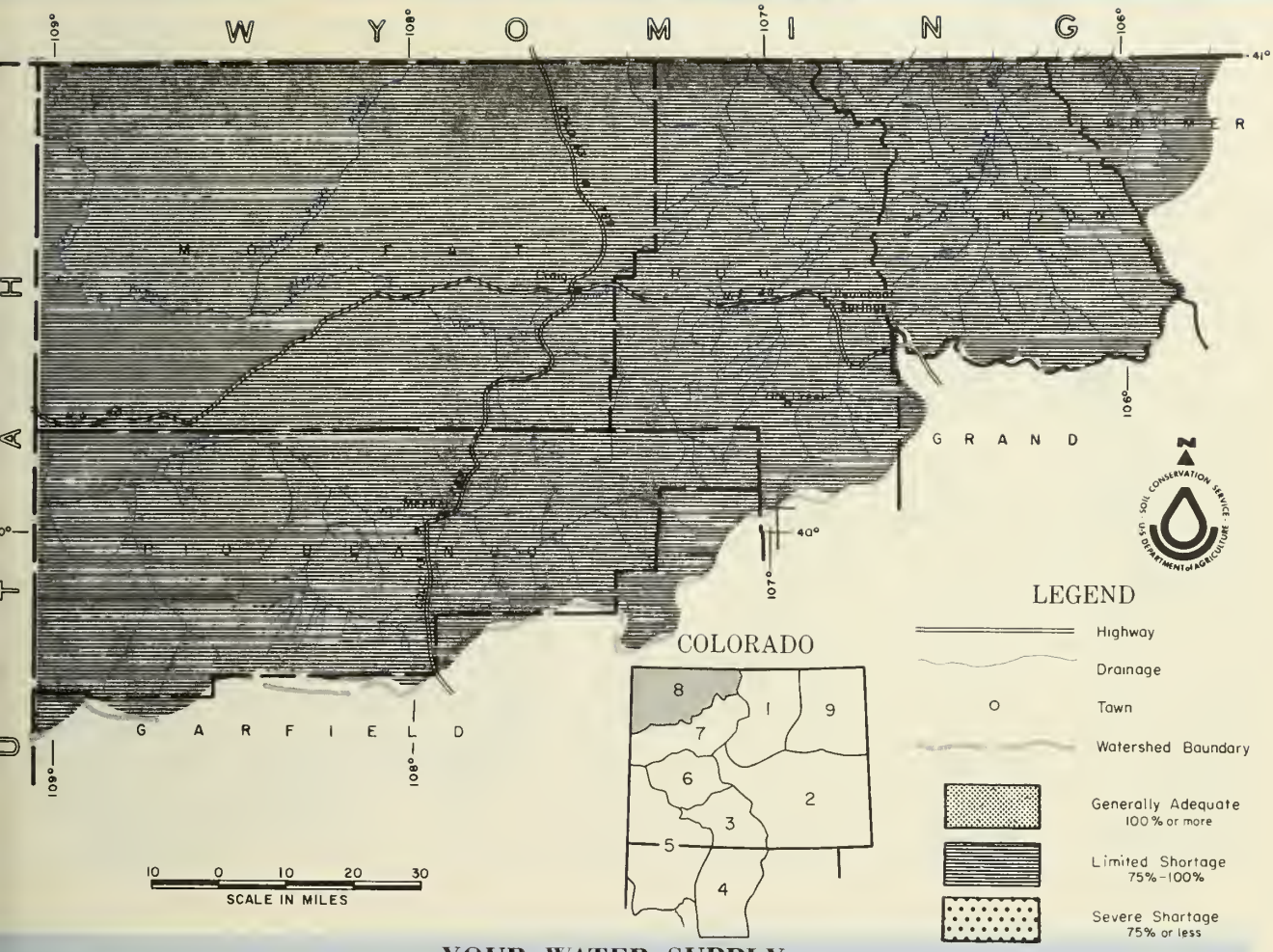
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

May as of 1972

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE REDUCED SLIGHTLY FROM LAST MONTH AND NOW RANGE FROM 70 TO 100 PERCENT OF THE 1953-67 AVERAGE. THE SNOWPACK STARTED MELTING EARLIER THAN USUAL AND THE WATER CONTENT ON LOW ELEVATION SNOW COURSES IS MUCH BELOW NORMAL. SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE ABOVE AVERAGE. SOIL MOISTURE CONDITIONS IN IRRIGATED AREAS ARE REPORTED AS FAIR.

This report prepared by
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DENVER, COLORADO

Issued by
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DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	180	94	191
Laramie at Glendevey	55	90	61
Little Snake at Lily	277	100	277
North Platte at Northgate	200	93	215
White nr Meeker	210	72	293
Yampa nr Maybell	750	88	853
Yampa at Steamboat Springs	225	87	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg.	Avg.
Hunt Creek	Avg.	Poor
Illinois River	Avg.	Fair
Michigan River	Avg.	Avg.
Oak Creek	Avg.	Poor
Trout Creek	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	3	46	55
Laramie	3	83	109
North Platte	5	68	92
White	2	55	64
Yampa	6	62	87

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	2	89	107
North Platte	2	111	131
Yampa	1	95	81

+ 1953-1967 period.

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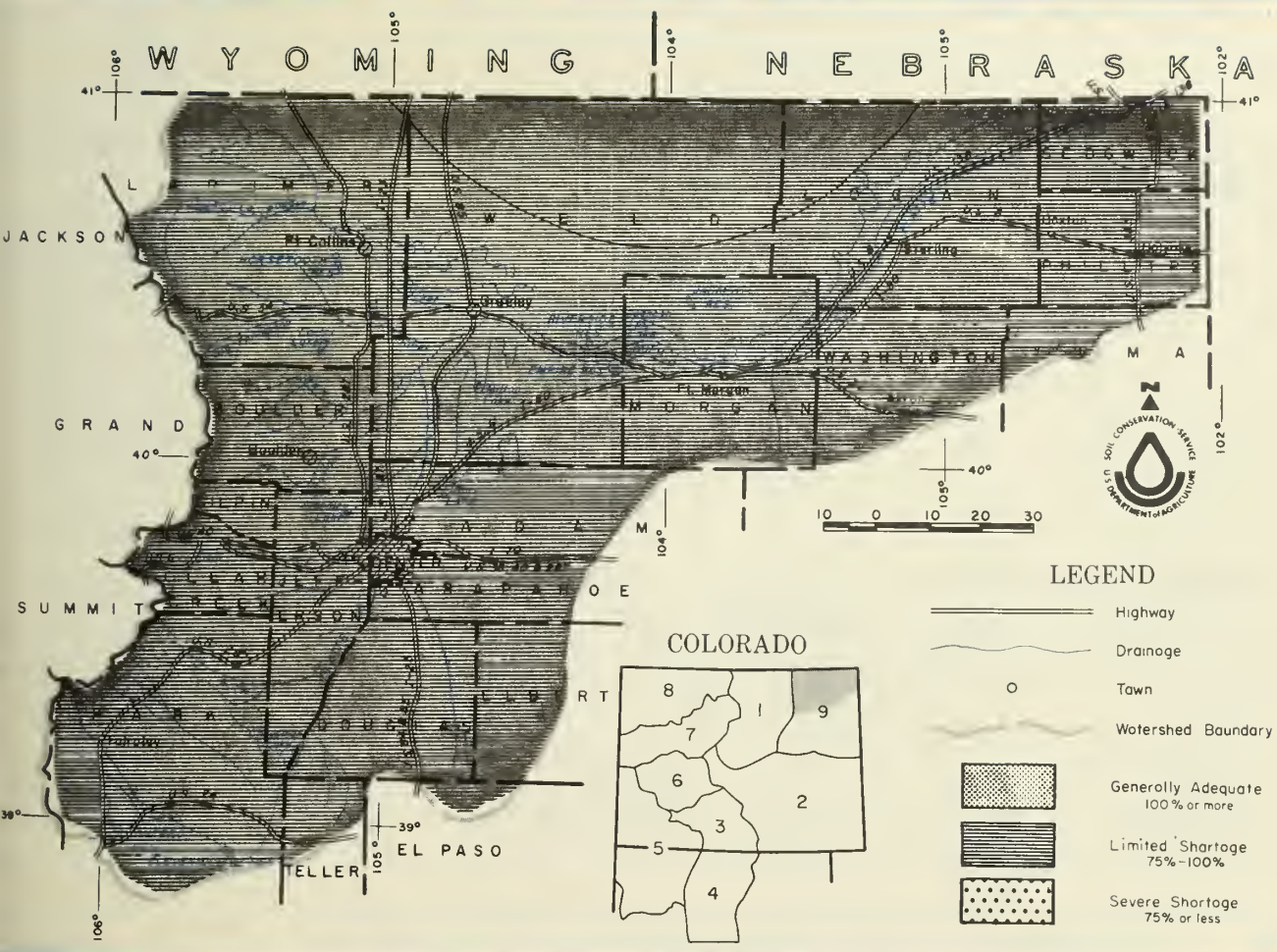
"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

May 1, 1972

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

LIMITED WATER SHORTAGES MAY EXIST ON THE LOWER SOUTH PLATTE ESPECIALLY LATE IN THE SEASON. THE SNOWPACK IS NEAR AVERAGE AT HIGH ELEVATIONS BUT DIMINISHES LOWER DOWN. FORECASTS RANGE FROM 86% ON THE ST. VRAIN TO 98% ON THE CACHE LA POUDRE. THE BASIN'S RESERVOIR STORAGE IS ABOVE NORMAL AND WILL PROVIDE EXCELLENT SUPPLEMENTAL SUPPLIES. SOIL MOISTURE CONDITIONS ARE REPORTED AS FAIR.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by
M. D. BUROICK ...STATE CONSERVATIONIST
O. W. GILLASPIE ...AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
STERLING, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	90	90	100
Boulder at Orodell	45	92	49
Cache La Poudre at Canyon Mouth (2)	210	98	215
Clear Creek at Golden (3)	105	88	119
Saint Vrain at Lyons (4)	60	86	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Avg.	Avg.
South Platte from Fort Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	75	98
Boulder	3	64	83
Cache La Poudre	8	75	118
Clear Creek	6	74	83
Saint Vrain	3	36	81
South Platte	3	89	123

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	2	98	98
Boulder	1	113	140
Cache La Poudre	2	89	107
Clear Creek	2	80	110
Saint Vrain	2	109	127
South Platte	2	85	101

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	107.2	109.0	86.4
Cheesman	79.0	74.0	77.7	50.2
Eleven Mile	97.8	81.0	96.4	72.9
Empire	37.7	33.1		29.0
Horsetooth	143.5	134.0	128.4	116.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	33.7	34.9	33.7
Julesburg	28.2	23.6	23.3	22.1
Prewitt	32.8	25.6	28.8	17.5
Point of Rocks	70.0	63.2	68.9	60.8
Riverside	57.5	58.6	63.6	51.0

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1972

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	5/1	57	19.5	23.6	17.1
McIntyre	4/27	44	10.7	11.7	9.4
Roach	4/26	64	19.1	23.9	18.7
North Platte River					
Cameron Pass	4/28	78	32.6	38.6	28.4
Columbine Lodge	4/26	41	18.9	27.1	21.4
Northgate	4/28	2	0.3	5.5	2.7
Park View	4/26	14	3.3	7.9	5.6
Willow Cr. Pass(B)	4/26	25	7.8	12.8	10.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/27	3	0.5	5.8	2.9
Boulder Falls	4/27	29	9.9	16.8	11.9
University Camp	4/27	49	19.0	23.1	20.7
Big Thompson River					
Deer Ridge	4/29	1	0.1	4.4	2.6
Hidden Valley	4/30	25	8.5	14.3	12.0
Lake Irene (B)	4/28	63	24.0	29.2	22.4
Long's Peak	4/26	35	12.2	16.4	12.0
Two Mile	4/29	60	20.0	22.5	17.0
Cache La Poudre					
Bennett Creek	4/25	3	1.0	9.1	- -
Big South	4/28	11	1.9	0.0	0.6
Cameron Pass	4/28	78	32.6	38.6	28.4
Chambers Lake	4/28	21	4.9	6.9	5.3
Deadman Hill	5/1	57	19.5	23.6	17.1
Hour Glass Lake	4/25	14	4.9	9.4	5.6
Joe Wright	4/28	74	27.8	33.7	- -
Lost Lake	4/28	49	13.0	11.7	8.9
Pine Creek	4/29	3	0.5	1.6	0.1
Red Feather	4/29	21	5.9	8.5	4.4
Clear Creek					
Baltimore (B)	4/27	3	0.5	5.8	2.9
Berthoud Falls	4/27	37	9.5	17.0	12.1
Empire	4/27	8	2.3	6.8	6.8
Grizzly Peak (B)	4/27	61	21.0	24.5	19.4
Loveland Lift	4/28	61	16.1	20.3	25.3
Loveland Pass	4/28	47	16.0	14.4	14.5
Saint Vrain River					
Copeland Lake	4/29	2	0.6	11.8	1.7
Ward	4/27	7	2.0	9.8	5.4
Wild Basin	4/29	33	13.0	21.7	12.2
South Platte River					
Como	4/27	15	3.6	4.1	- -
Geneva Park	4/28	5	1.3	0.9	1.2
Horseshoe Mt.	4/26	41	12.6	11.2	- -
Hoosier Pass	4/27	44	14.2	13.4	12.0
Jefferson Creek	4/27	31	9.4	13.8	7.1
Mosquito	4/26	12	3.5	3.7	- -
Trout Creek Pass	4/26	0	0.0	0.1	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/26	0	0.0	5.3	2.2
Cooper Hill (B)	4/28	47	10.8	13.4	11.1
East Fork	4/27	23	6.8	7.8	7.4
Four Mile Park	4/28	0	0.0	0.3	1.0
Fremont Pass	4/27	60	18.9	17.7	17.9
Garfield	4/26	15	5.2	5.9	8.5
Hermit Lake	4/27	0	0.0	0.0	- -
Monarch Pass	4/26	38	13.1	14.0	16.5
Tennessee Pass	4/28	26	8.2	6.7	7.7
Twin Lakes Tunnel	4/28	32	12.1	9.9	8.7
Westcliffe	4/27	0	0.0	0.0	1.0
Cucharas River					
Blue Lakes	4/26	0	0.0	0.0	0.5
Cucharas Pass	4/26	0	0.0	0.0	- -
La Veta Pass (B)	4/26	0	0.0	0.0	1.6
Purgatoire River					
Bourbon	4/28	0	0.0	0.0	1.7
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/28	0	0.0	0.0	0.6
Summitville	4/27	50	16.6	16.2	19.0
Conejos River					
Cumbres	4/26	0	0.0	3.9	12.6
La Manga	4/26	12	4.1		
Platoro	4/28	4	1.7	3.3	9.9
River Springs	4/28	0	0.0	0.0	0.5
Culebra River					
Brown Cabin				0.0	- -
Cottonwood (B)				- -	- -
Culebra	4/28	0	0.0	0.0	3.5
La Veta Pass (B)	4/28	0	0.0	0.0	1.6
Trinchera (B)				0.0	- -
Rio Grande					
Cochetopa Pass	4/26	4	1.1	2.2	2.6
Grayback	4/27	5	2.7	3.4	- -
Hiway	4/28	46	21.0	19.8	28.1
Lake Humphrey	4/28	1	0.5	0.0	0.4
Love Lake	4/28	0	0.0	0.0	- -
Pass Creek	4/28	0	0.0	0.0	3.9
Pool Table	4/28	1	0.3	0.0	1.9
Porcupine	4/28	8	2.6	4.6	6.6
Santa Maria	4/28	0	0.0	0.0	0.5
Upper Rio Grande	4/28	0	0.0	1.0	1.8
Wolf Cr. Pass	4/28	10	5.3	7.3	22.0
Wolf Cr. Summit	4/28	59	27.9	24.3	30.0
SAN JUAN-DOLORES					
Animas River					
Cascade	4/27	0	0.0	0.0	3.6
Lemon	4/27	0	0.0	0.0	- -
Mineral Creek	4/27	11	3.6	6.3	10.5
Molas Lake	4/27	3	1.2	2.4	6.8
Purgatory	4/27	25	10.8	7.2	- -
Red Mountain	4/27	75	28.3	32.0	30.3
Silverton Sub-Sta	4/27	0	0.0	0.0	0.1
Spud Mountain	4/27	26	11.3	13.7	22.2
Dolores River					
Lizzard Head	4/28	7	3.1	8.3	12.9
Lone Cone	4/28	2	0.9	3.1	- -
Rico	4/28	0	0.0	0.0	0.4
Telluride	4/27	0	0.0	1.4	0.8
Trout Lake	4/27	3	0.3	2.1	8.5
San Juan River					
Chama Divide (B)	4/26	0	0.0	0.0	- -
Chamita (B)	4/26	0	0.0	0.0	- -
Upper San Juan	4/28	15	7.9	8.9	26.6
Wolf Cr. Pass (B)	4/28	10	5.3	7.3	22.0
Wolf Cr. Summit	4/28	59	27.9	24.3	30.0

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1972

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches): Last Year	Past Record: Water Content (Inches): Avg 53 67
GUNNISON BASIN					
Gunnison River					
Alexander Lake	5/1	34	14.5	20.6	21.0
Blue Mesa	4/28	0	0.0	0.0	1.9
Butte	4/28	32	11.3	12.6	- -
Cochetopa Pass(8)	4/26	4	1.1	2.2	2.6
Crested Butte	4/27	1	0.2	2.0	7.1
Keystone	4/28	36	15.1	16.2	17.1
Lake City	4/26	4	1.2	2.2	3.5
Mesa Lakes (B)	4/27	25	8.2	14.9	15.1
McClure Pass	4/27	0	0.0	7.8	9.3
Park Cone	4/27	15	4.4	3.8	7.7
Park Reservoir	4/28	42	15.8	21.5	23.6
Porphyry Creek	4/26	37	11.5	16.5	16.5
Tomichi	4/26	23	7.4	10.4	10.0
Surface Creek					
Alexander Lake	5/1	34	14.5	20.6	21.0
Mesa Lakes (B)	4/27	25	8.2	14.9	15.1
Park Reservoir	4/28	42	15.8	21.5	23.6
Uncompahgre River					
Ironton Park	4/28	0	0.0	0.0	6.7
Red Mountain Pass	4/27	75	28.3	32.0	30.3
Telluride (8)	4/27	0	0.0	1.4	0.8
COLORADO BASIN (Main)					
Blue River					
Blue River	4/27	16	4.1	4.8	6.4
Fremont Pass	4/27	60	18.9	17.7	17.9
Frisco	4/27	8	2.4	4.8	4.6
Grizzly Peak	4/27	61	21.0	24.5	19.4
Hoosier Pass (8)	4/27	44	14.2	13.4	12.0
Shrine Pass	4/27	63	23.3	20.6	18.7
Snake River	4/27	9	1.0	3.4	3.5
Summit Ranch	4/27	17	4.8	6.7	4.8
Colorado River					
Arrow	4/26	31	10.0	17.5	9.2
Berthoud Pass	4/27	54	17.4	21.1	14.3
Berthoud Summit	4/27	67	22.0	26.3	20.6
Cooper Hill	4/28	47	10.8	13.4	11.1
Fiddler Gulch	4/25	38	11.6	- -	14.7
Glenmar Ranch	4/26	11	1.3	6.4	3.8
Gore Pass	4/27	24	6.8	10.5	7.3
Grand Lake	4/26	11	2.3	6.3	3.4
Lake Irene	4/28	63	24.0	29.2	22.4
Lapland	4/25	21	8.6	10.2	6.9
Lulu	4/29	58	23.4	28.3	18.3
Lynx Pass	4/27	22	6.1	12.0	7.1
McKenzie Gulch	4/26	2	0.5	0.0	0.6
Middle Fork	4/26	17	2.9	6.7	5.7
Milner	4/28	30	10.8	16.2	12.0
North Inlet	4/26	12	3.6	7.8	5.9
Pando	4/27	21	7.0	8.4	7.7
Phantom Valley	4/26	8	1.7	11.0	6.2
Ranch Creek	4/26	32	10.0	14.2	9.0
Tennessee Pass	4/28	26	8.2	6.7	7.7
Vail Pass	4/27	38	14.2	19.9	15.0
Vasquez	4/26	37	13.1	17.3	12.4
Roaring Fork River					
Aspen	4/28	53	21.7	17.9	16.0
Chapman	4/27	40	14.6	14.9	- -
Independence Pass	4/28	46	15.1	18.1	16.2
Ivanhoe	4/28	61	21.0	20.6	17.3
Kiln	4/28	40	13.8	12.6	- -
Last Chance	4/28	40	14.4	13.1	- -
Lift	4/28	50	17.7	21.2	18.0
McClure Pass	4/27	0	0.0	7.8	9.3
Nast	4/27	0	0.0	1.0	1.8
North Lost Trail	4/27	16	2.5	5.4	7.5
Williams Fork River					
Glenmar Ranch	4/26	11	1.3	6.4	3.8
Jones Pass	4/27	56	18.0	20.8	15.4
Middle Fork	4/26	17	2.9	6.7	5.7
Willow Creek					
Granby	4/26	8	2.5	3.7	3.6
Willow Cr. Pass	4/26	25	7.8	12.8	10.0
Plateau Creek					
Mesa Lakes	4/27	25	8.2	14.9	15.1
Park Reservoir	4/28	42	15.8	21.5	23.6
Trickle Divide	4/28	56	20.5	24.4	26.5
YAMPA BASIN					
Elk River					
Clark	4/27	0	0.0	1.5	3.1
Elk River	4/26	33	11.9	18.7	13.6
Hahn's Peak	4/26	5	1.6	9.0	7.8
White River					
Burro Mountain	4/28	28	8.8	16.1	14.5
Rio Blanco	4/27	23	6.3	11.5	9.1
Yampa River					
Bear River	4/27	18	4.9	8.6	7.4
Columbine (B)	4/26	41	18.9	27.1	21.4
Dry Lake	4/24	32	14.0	21.1	15.2
Lynx Pass (B)	4/27	22	6.1	12.0	7.1
Rabbit Ears	4/26	68	26.9	37.6	25.9
Yampa View	4/26	13	3.8	13.8	8.4
Crosho	4/27	35	11.2	16.5	- -

NOTE: NS - No Survey
(8) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1972

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	4/26/72	11.1	10.7	9.1	8.4
Willow Pass	4/26/72	9.5	9.4	9.0	7.0
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	4/27/72	6.9	6.0	5.3	4.3
Big Thompson River					
Beaver Dam	4/27/72	7.1	5.4	5.2	4.7
Guard Station		6.9		4.7	4.5
Two Mile	4/27/72	9.1	4.5	4.9	5.4
Clear Creek					
Clear Creek	4/28/72	9.5	6.4	8.7	5.7
Hoop Creek	4/28/72	4.9	3.3	3.4	3.1
Cache La Poudre River					
Feather	5/1/72	10.1	9.7	9.8	7.9
Laramie Road	4/28/72	12.4	8.1	10.2	8.7
South Platte River					
Hoosier Pass	4/27/72	7.8	5.0	6.4	5.4
Kenosha Pass	4/27/72	4.4	4.0	4.2	3.5
ARKANSAS BASIN					
Arkansas River					
Garfield	4/26/72	6.7	4.2	4.6	4.8
Leadville	4/27/72	7.8	3.0	3.8	4.9
Twin Lakes Tunnel	4/27/72	4.5	2.5	2.6	3.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	4/26/72	10.7	6.8	7.3	8.8
Rio Grande					
					5.7
Bristol View	4/28/72	6.1	5.9	6.0	4.7
La Veta Pass	4/26/72	11.9	10.1	11.8	11.6
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	4/27/72	9.1	5.5	5.9	7.7
Mineral Creek	4/27/72	5.7	3.2	3.4	4.5
Molas Lake	4/27/72	9.4	6.7	6.6	6.6
Dolores River					
Dolores	4/28/72	19.6	3.3	5.9	12.2
Lizzard Head	4/28/72	11.8	4.8	5.4	8.2
Rico	4/28/73	13.8	8.7	10.4	7.3
GUNNISON BASIN					
Gunnison River					
King	4/26/72	3.3	2.3	2.3	2.3
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	4/27/72	4.2	2.9	3.6	3.0
Colorado River					
Berthoud Pass	4/27/72	3.9	3.1	3.4	2.9
Gore	4/27/72	4.9	4.5	4.5	4.1
Grand Mesa	4/28/72	12.5	12.1	12.5	9.9
Ranch Creek	4/26/72	8.7	6.0	6.5	6.2
Vail	4/27/72	12.3	8.9	9.0	10.5
Roaring Fork River					
Placita	4/27/72	9.3	8.0	8.2	7.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	4/26/72	19.0	12.2	12.8	15.0

'LL PR FIL 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- National Weather Service

War Department

- Army Engineer Corps

Atomic Energy Commission

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Public Service Company of New Mexico

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City of Greeley
City of Fort Collins

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Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

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San Luis Valley Irrigation District
Santa Maria Reservoir Company
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Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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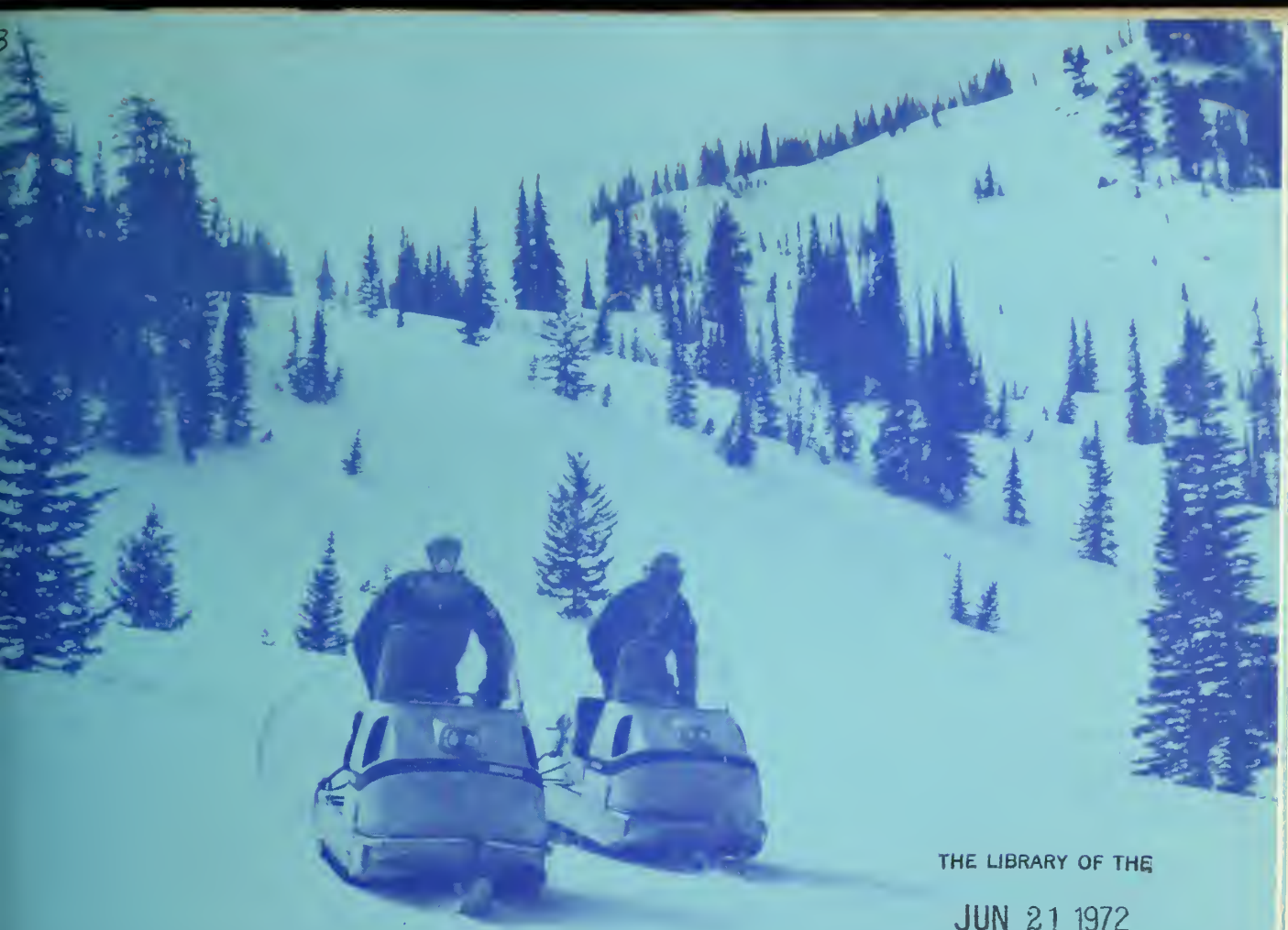

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

MAY 15, JUNE 1, 1972
and
SPECIAL MEASUREMENTS

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

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COVER PHOTO NUMBER ORC 121-3

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STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

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USDA-SCS-PORTLAND, OREG 1970

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

KENNETH E. GRANT
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.

Released by

M. D. BURDICK
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
DENVER, COLORADO

KENNETH L. WILLIAMS
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SOIL CONSERVATION SERVICE
ALBUQUERQUE, NEW MEXICO

In Cooperation with

DONALD F. HERVEY
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C S U
EXPERIMENT STATION

S. E. REYNOLDS
STATE ENGINEER
STATE OF NEW MEXICO

C. J. KUIPER
STATE ENGINEER
STATE OF COLORADO

Report prepared by

JACK N. WASHICHEK, Snow Survey Supervisor
and
RONALD E. MORELAND, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1972

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1953-67 Average	Jan. 1 Last Year	Feb. 1 1953-67 Average
Berthoud Summit	12/28	32	6.8	7.2	10.3	10.8
Columbine Lodge	12/29	44	10.1	7.2	11.7	15.6
Fremont Pass	12/28	31	5.9	5.8	7.3	9.5
Mesa Lakes	12/30	41	11.5	6.5	10.5	10.3
Porphyry Creek	12/30	36	8.0	6.9	7.8	10.1
Red Mountain	12/30	67	19.1	11.4	17.0	17.0
Spud Mountain	12/29	70	19.2	9.7	11.4	15.0
Tennessee Pass	12/29	27	5.2	3.7	3.1	6.2
Two Mile	12/30	27	6.3	5.9	6.8	7.9
University Camp	12/30	22	5.1	7.1	7.8	10.9
Upper San Juan	12/30	76	20.7	13.6	15.2	19.4
Vail Pass	12/28	36	7.9	5.6	9.3	10.0
Wolf Creek Pass	12/30	69	18.7	13.1	14.2	17.8
Wolf Creek Summit	12/30	79	23.3	13.8	14.7	17.7

Only a few snow courses are read January 1st. From this limited information the Colorado snow pack looks relatively good, especially in the southwestern portion of the state. Some snow courses in this area have February 1st snow packs already. The one area that seems to be slightly deficient is the South Platte Drainage and it's northern tributaries. The snow pack in this area is slightly below normal especially at the lower elevations.

Mountain soils contain about normal amounts of moisture.

Carry-over storage in Colorado's numerous reservoirs is excellent in all areas except the Rio Grande Drainage. Here storage is slightly deficient.

May 15, 1972

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Averages Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	May 15 1953-67	May 15 Last Year	May 1 1953-67
Berthoud Summit	5/15	53	21.7	19.3	27.0	20.6
Cameron Pass	5/16	65	31.5	25.6	42.0	28.4
Columbine Lodge	5/15	26	12.0	12.5	15.5	21.4
Fremont Pass	5/15	54	20.6	15.5	17.9	17.9
Mesa Lakes	5/15	4	1.6	8.8	11.0	15.1
Milner	5/14	21	7.4	7.5	14.6	12.0
Park View	5/16	2	0.8	2.1	3.4	5.6
Porphyry	5/12	28	11.2	13.4	13.4	16.5
Red Mountain	5/15	55	26.1	30.3	30.5	25.4
Spud Mountain	5/15	18	8.6	18.9	12.4	22.2
Tennessee Pass	5/15	5	1.6	2.4	0.0	7.7
Two Mile	5/14	62	21.0	16.4	22.9	17.0
University Camp	5/13	39	13.0	18.4	22.1	20.7
Upper San Juan	5/15	0	0.0	18.6	6.2	26.6
Vail Pass	5/15	25	10.6	10.2	17.1	15.0
Willow Creek Pass	5/16	9	4.3	5.4	9.2	10.0
Wolf Creek Pass	5/15	0	0.0	14.5	3.4	22.0
Wolf Creek Summit	5/15	50	23.3	31.4	25.7	30.0

Water supply outlook was improved slightly in the northern half of the state during the first 15 days of May. Snowfall was above normal during this period. Cool weather has retarded the snow melt. Rivers have not risen appreciably. The snow line has now moved up to 10,500 feet on south slopes and 9,500 feet on north-facing slopes.

The southern portion of the state still has poor water prospects. The first 15 days of May produced very little snowfall. Rivers have risen in these areas. Shortages can be expected.

May 15, 1972

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2150 West 25th Avenue
Denver, Colorado 80211

Report Prepared by
Jack H. Hopkins and
Donald C. Normand
Soil Conservation Service

Snow Course	Current Information: Date of Survey	Snow Depth Inches	Water Content Inches	Water Content in Inches May 15 1972-1/	Prior Record Average: Water Content in Inches May 15 Last Year	May 1 1972-1/2
Berthoud Summit	5/15	51	21.7	10.3	14.0	20.6
Cameron Pass	5/15	65	27.3	19.6	16.0	19.4
Columbine Lodge	5/16	20	12.0	12.5	18.5	21.9
Fremont Pass	5/15	64	23.4	12.5	22.0	22.9
Lona Lakes	5/15	4	1.6	3.0	11.0	15.1
Milner	5/16	21	7.4	7.5	14.5	12.0
Pike View	5/15	2	0.9	2.1	7.0	5.5
Porphyry	5/12	20	17.2	13.4	13.4	16.5
Red Mountain	5/15	52	20.1	10.3	30.5	25.4
Stout Mountain	5/15	10	0.6	10.0	12.4	22.2
Tennessee Pass	5/16	5	1.6	2.1	8.0	7.7
Two Mile	5/14	62	24.0	16.4	28.9	17.0
University Camp	5/13	37	13.0	18.1	32.1	20.7
Upper San Juan	5/15	0	0.0	12.6	6.5	8.6
Vail Pass	5/15	26	10.6	10.2	17.1	15.0
Willow Creek Pass	5/16	9	4.1	6.4	9.2	10.0
Wolf Creek Pass	5/15	0	0.0	14.5	2.4	22.0
Wolf Creek Summit	5/15	50	23.3	31.4	25.7	30.0

Water supply outlook was improved slightly in the northern half of the state during the first 15 days of May. Snowfall was above normal during this period. Cool weather has retarded the snow melt. Rivers have not risen appreciably. The snow line has now moved up to 10,000 feet on south slopes and 9,500 feet on north-facing slopes.

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June 1, 1972

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Averages Water Content in Inches		
Snow Courses	Date of Survey	Snow Depth Inches	Water Content Inches	June 1 Average	June 1 Last Year	May 1 1953-67
Berthoud Summit	5/30	29	11.8	11.5	24.0	20.6
Cameron Pass	6/1	35	18.5	18.2	42.5	28.4
Columbine Lodge	5/31	0	0.0	3.0	0.9	21.4
Fremont Pass	5/30	28	11.2	7.7	13.0	17.9
Joe Wright	6/1	32	14.9	- -	31.5	27.8*
Mesa Lakes	5/31	0	0.0	0.7	2.7	15.1
Milner Pass	5/29	0	0.0	- -	6.7	12.0
Park View	6/1	0	0.0	0.1	0.0	5.6
Porphyry Creek	5/30	0	0.0	6.6	7.8	16.5
Red Mountain	5/30	10	4.5	12.2	24.4	25.4
Spud Mountain	5/30	9	4.2	10.6	12.9	22.2
Tennessee Pass	5/30	0	0.0	0.0	0.0	7.7
Two Mile	5/30	44	17.7	12.7	21.0	17.0
University Camp	5/29	19	8.4	10.7	20.2	20.7
Upper San Juan	5/31	0	0.0	5.2	0.0	26.6
Vail Pass	5/30	6	2.7	3.3	9.5	15.0
Willow Creek Pass	6/1	0	0.0	0.9	2.6	10.0
Wolf Creek Pass	5/31	0	0.0	5.5	0.0	22.0
Wolf Creek Summit	5/31	28	14.1	23.7	22.4	30.0

* May 1, 1972

The snowpack, except at the very high elevations, has melted. Water supply outlook remains about the same as May 1. The northern third should have near normal supplies; the middle third will vary from 70 percent to near normal. The southern third will have short supplies.

Forecasts are based on normal precipitation for the remainder of the year. So far precipitation over the state has been below normal.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- National Weather Service

War Department

- Army Engineer Corps

Atomic Energy Commission

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City of Greeley
City of Fort Collins

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Colorado River Water Conservation District

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San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
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EARLY SEASON SNOW REPORT FOR COLORADO

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UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

January 1, 1973

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

DOC

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
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Wolf Creek Summit	12/29	80	23.4	13.8	23.3	17.7

Only a limited number of snow courses are read January first. These few measurements indicate the general conditions on all the major river drainages. The snowpack is above average on every measured snow course. The southwest corner of the state has a substantially above normal pack. Wolf Creek Pass is 170 percent of normal and almost identical to last year.

The plains have had considerably more snow than usual.

Mountain soils are wet especially in the third and fourth foot.

The lower half of the state needs a considerably above normal snowpack to assure adequate water supplies this summer.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

THE
FEB 2 1973
UNIVERSITY OF ILLINOIS
AT URBANA-CHAMPAIGN

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
FEB. 1, 1973

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Washington	360 U.S. Court House, Spokane, Washington 99201
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USDA SCS-PORTLAND DREG 1973

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and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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SOIL CONSERVATION SERVICE
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WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rack Creek, and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

February 1, 1973

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of

February 1, 1973

IF SNOW CONTINUES TO FALL OVER COLORADO AND NEW MEXICO AT LEAST AT A NORMAL RATE FOR THE REMAINDER OF THE WINTER, WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER.

NORTHERN NEW MEXICO AND SOUTHERN COLORADO, ESPECIALLY THE SOUTHWEST CORNER OF COLORADO HAVE AN EXCELLENT SNOWPACK. THE MIDDLE PORTION OF COLORADO HAS SLIGHTLY BETTER THAN AVERAGE SNOW AND THE NORTHERN PORTION OF COLORADO ONLY ABOUT AVERAGE.

SOILS IN THE IRRIGATED AREAS OF BOTH STATES ARE REPORTED TO BE IN EXCELLENT CONDITION.

CARRY-OVER STORAGE OVER COLORADO DROPPED OFF SLIGHTLY FROM LAST YEAR. NEW MEXICO STORAGE IS SLIGHTLY UP FROM LAST YEAR DUE TO HEAVY FALL PRECIPITATION.

COLORADO

SNOWPACK IN COLORADO RANGES FROM 15 PERCENT OF NORMA IN THE SOUTHWEST CORNER TO JUST NORMAL ON THE SOUTH PLATTE AND NORTHERN PORTION OF THE STATE. SUMMER FLOWS SHOULD BE ADEQUATE IF SNOW KEEPS FALLING AT A NORMAL RATE. STREAMFLOW FORECASTS IN THE SOUTHERN PORTION OF THE STATE SHOULD BE CONSIDERABL ABOVE NORMAL. IT IS STILL TOO EARLY TO BE OPTIMISTIC BECAUSE SEVERAL MONTHS O POSSIBLE SNOWFALL REMAIN. VALLEY SOILS ARE REPORTED TO BE IN GOOD CONDITION A OVER THE STATE. SOUTH PLATTE STORAGE IS 120 PERCENT OF NORMAL; ARKANSAS DOWN 73 PERCENT; AND THE RIO GRANDE DRAINAGE AT 95 PERCENT.

NEW MEXICO

SNOWFALL HAS BEEN CONSIDERABLY ABOVE NORMAL SO FAR THIS YEAR AND VERY SIMILAR TO LAST YEAR. SOME SNO COURSES ARE INDICATING 150 PERCENT OF NORMAL AND HIGHER. ONLY ABOUT 50 PERCENT OF THE SNOW SEASON HAS PASSED, SO IT IS TOO EARLY TO FORECAST ADEQUATE WATER SUPPLIES. CARRY-OVER STORAGE IN NEW MEXICO RESERVOIRS IS UP FROM LAST YEAR. CURRENT STORAGE IS NEAR NORMAL -- AN 180 PERCENT BETTER THAN LAST YEAR. SOIL IN THE IRRIGATED AREAS OF THE STATE ARE REPORTED TO BE IN EXCELLENT CONDITION.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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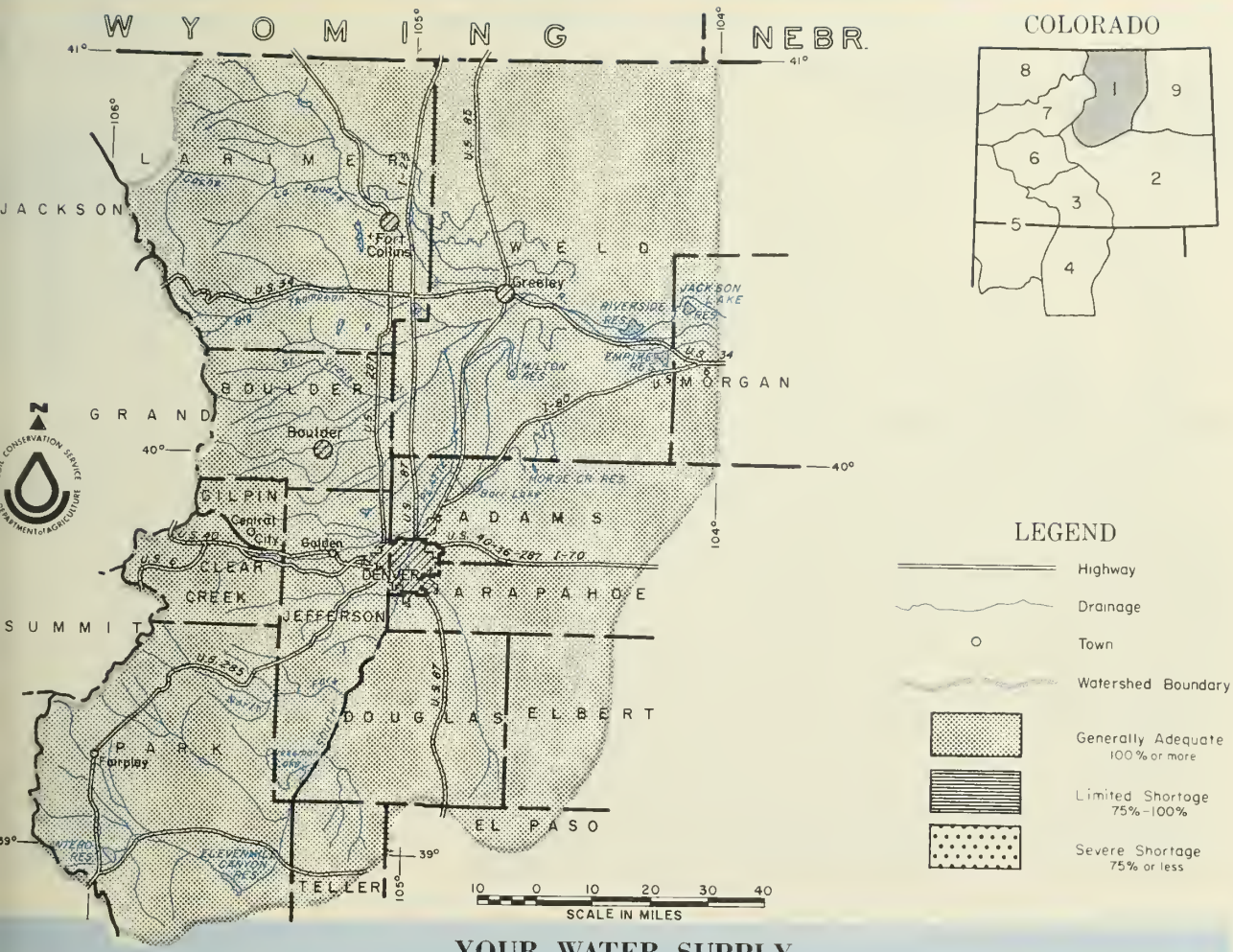

YOUR WATER SUPPLY

SNOWPACK CONDITIONS ON THE SOUTH PLATTE TRIBUTARIES RANGE FROM AVERAGE TO ABOVE AVERAGE. THE POUDRE AND BIG THOMPSON APPEAR TO BE SLIGHTLY HIGHER THAN THE SOUTHERN TRIBUTARIES. SOIL MOISTURE IN THE MOUNTAIN AREAS IS NEAR AVERAGE WHILE THE IRRIGATED AREAS REPORT EXCELLENT CONDITIONS. RESERVOIR STORAGE IS SLIGHTLY BELOW LAST YEAR BUT ABOUT 125 PERCENT OF THE 1953-67 AVERAGE. AVERAGE OR ABOVE AVERAGE SNOWFALL IS NEEDED TO INSURE AVERAGE STREAMFLOW THIS SUMMER.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg	Avg
Coal Creek	Avg	Avg
Deer Creek	Avg	Avg
North Fork of South Platte	Avg	Avg
North Fork of Cache La Poudre	Avg	Avg
Ralston Creek	Avg	Avg
Rock Creek	Avg	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mu diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	97	115
Boulder	3	90	96
Cache La Poudre	7	110	136
Clear Creek	6	118	100
Saint Vrain	2	102	152
South Platte	3	100	112

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	93	102
Boulder	1	88	84
Cache La Poudre	2	102	93
Clear Creek	2	125	100
Saint Vrain	2	94	89
South Platte	2	126	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	27.4	21.0	17.6
Black Hollow	8.0	4.3	4.2	3.3
Boyd Lake	44.0	37.5	35.9	27.6
Cache La Poudre	9.5	7.8	7.8	6.6
Carter Lake	108.9	83.7	88.2	61.9
Chambers Lake	8.8	3.8	1.3	2.3
Cheesman	79.0	43.4	79.1	45.6
Cobb Lake	34.3	20.9	20.4	9.9
Eleven Mile	97.8	93.0	76.2	72.0
Fossil Creek	11.6	8.8	8.8	5.4
Gross	43.1	23.6	28.2	24.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6.4	4.5	5.0	3.1
Horsetooth	143.5	84.5	90.6	81.2
Lake Loveland	14.3	9.4	11.4	7.9
Lone Tree	9.2	8.2	8.2	6.0
Mariano	5.4	5.2	5.3	3.7
Marshall	10.3	3.0	5.4	2.1
Marston	18.0	14.8	15.6	14.1
Milton	24.4	13.3	16.0	9.0
Standley	18.5	18.1	30.1	7.9
Terry Lake	42.0	5.8	5.7	4.6
Union	12.7	10.8	12.1	7.8
Windsor	18.6	12.0	18.6	7.6

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

IF SNOW CONTINUES TO FALL AT LEAST NORMAL THE ARKANSAS WATER USERS SHOULD HAVE A GOOD YEAR. THE HEADWATERS SNOWPACK IS 111 PERCENT OF NORMAL AS OF FEBRUARY 1. THE SOUTHERN TRIBUTARIES HAVE EVEN BETTER SNOW AND INDICATE 136 PERCENT OF NORMAL. RESERVOIR CARRY-OVER STORAGE IS BELOW NORMAL AND BELOW LAST YEAR AT THIS TIME. SOILS IN THE IRRIGATED AREAS ARE IN GOOD CONDITION. MOUNTAIN SOILS HAVE NORMAL MOISTURE ON THE SOUTHERN TRIBUTARIES AND CONSIDERABLY BETTER ON THE ARKANSAS HEADWATERS.

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LA JUNTA, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg	Fair
Fountain Creek	Avg	Fair
Grape Creek	Avg	Fair
Hardscrabble Creek	Avg	Fair
Huerfano	Avg	Fair
Monument Creek	Avg	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	7	111	108
Cucharas and Purgatorie	2	136	88

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	134	110
Cucharas and Purgatorie	1	97	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe Creek	61.6	0.0	14.4	11.5
Clear Creek	11.4	5.2	5.4	6.6
Cucharas	40.0	- -	- -	6.9
Great Plains	150.0	13.5	35.8	26.9
Horse Creek	26.9	0.0	0.0	4.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	11.9	18.3	81.5
Meredith	41.9	14.6	3.2	5.7
Model	15.0	--	0.9	2.6
Turquoise	130.0	48.3	58.5	6.9
Twin Lakes	57.9	25.0	30.4	19.7

+ 1953-1967 period.

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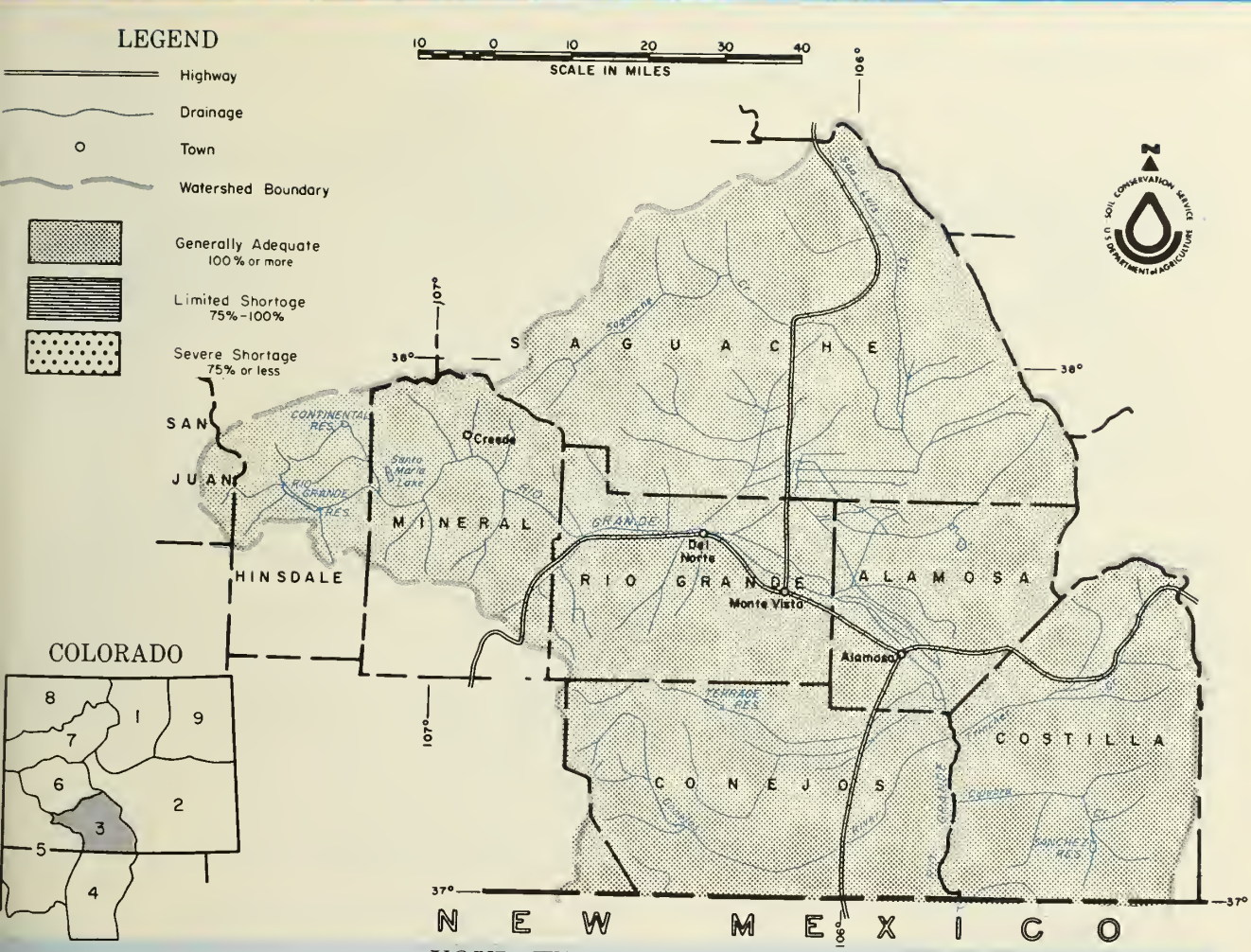
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

IF AT LEAST NORMAL AMOUNTS OF SNOW CONTINUE TO FALL FOR THE REMAINDER OF THE WINTER, SPRING STREAMFLOW SHOULD BE EXCELLENT OVER THE ENTIRE RIO GRANDE DRAINAGE. CURRENT SNOWPACK RANGES FROM 120 PERCENT OF NORMAL ON THE CONEJOS TO 175 PERCENT ON THE ALAMOSA. VALLEY SOILS ARE IN GOOD CONDITION FOR THIS TIME OF THE YEAR. MOUNTAIN SOILS CONTAIN ABOUT NORMAL MOISTURE. RESERVOIR STORAGE IS DOWN SLIGHTLY FROM LAST YEAR, BUT STILL NEAR NORMAL.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc	Exc
Sangre de Cristo Creek	Exc	Exc
Trinchera Creek	Exc	Exc

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	137	175
Conejos	4	123	120
Culebra	2	106	141
Rio Grande	10	105	139

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	1	92	84
Conejos	1	92	84
Culebra	2	96	90
Rio Grande	2	108	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	4.5	6.1	3.8
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	17.2	14.7	10.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	5.0	9.5	10.6
Santa Maria	45.0	4.5	6.8	5.3
Terrace	17.7	5.1	5.0	3.5

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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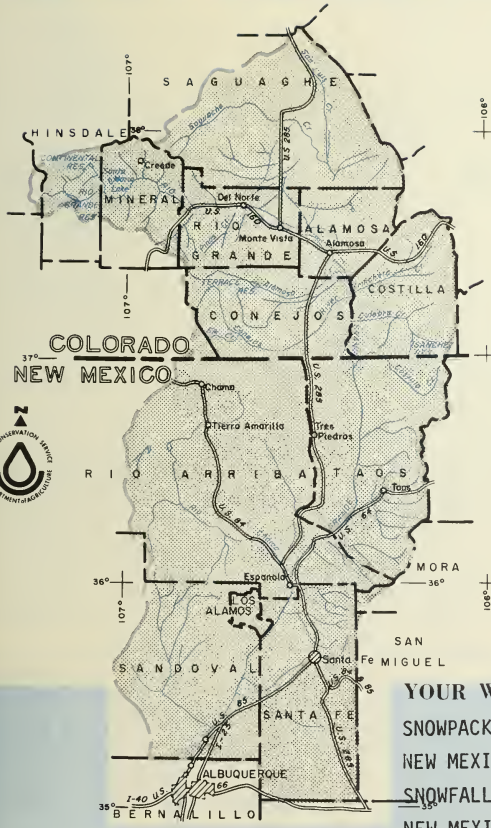

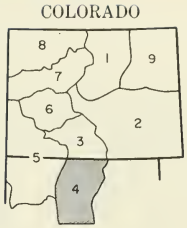

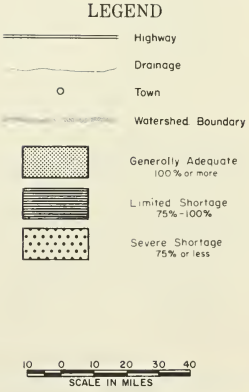

YOUR WATER SUPPLY

SNOWPACK IS EXCELLENT OVER ALL OF NORTHERN NEW MEXICO AND SOUTHERN COLORADO. IF SNOWFALL CONTINUES TO BE AT LEAST NORMAL, NEW MEXICO COULD HAVE BEST WATER SUPPLIES IN SEVERAL YEARS. RESERVOIR STORAGE IS BETTER THAN A YEAR AGO DUE TO FALL STORMS. THEY WILL PROVIDE GOOD SUPPLEMENTAL WATER SUPPLIES. SOIL MOISTURE IS REPORTED AS GOOD IN ALL IRRIGATED AREAS.

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SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo	Avg.	Fair
Jemez River	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Avg.	Fair
Santa Fe Creek	Avg.	Fair

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costillo Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	163	169
Rio Chama	4	137	140
Rio Grande, N.M.	10	131	140
Rio Hondo	1	131	---
Red River	2	130	137

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	---	175
Rio Chama	2	48	84
Rio Grande	4	118	141
Red River	1	89	73

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	85	46	73
Caballo	344	69	17	47
Conchas	273	141	79	163

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Elephant Butte	2195	334	225	374
Elvado	195	22	1	4
McMillan-Avalon	38	33	13	19

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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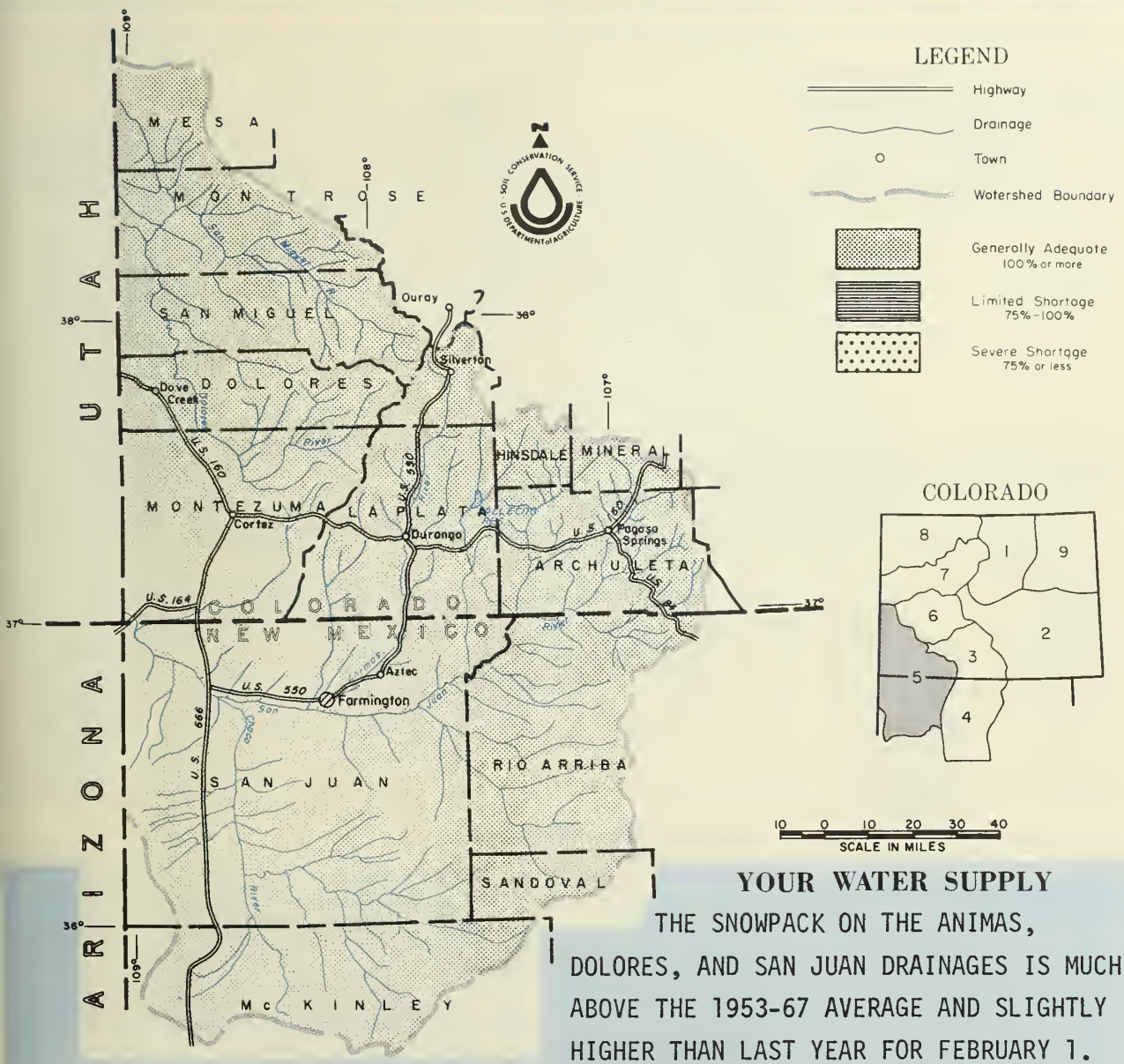

YOUR WATER SUPPLY

THE SNOWPACK ON THE ANIMAS, DOLORES, AND SAN JUAN DRAINAGES IS MUCH ABOVE THE 1953-67 AVERAGE AND SLIGHTLY HIGHER THAN LAST YEAR FOR FEBRUARY 1. RESERVOIR STORAGE IS ABOUT 150 PERCENT OF AVERAGE. SOIL MOISTURE CONDITIONS ARE REPORTED AS EXCELLENT. AVERAGE SNOWFALL THE REMAINDER OF THE SEASON WILL INSURE ABOVE AVERAGE STREAMFLOWS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc	Avg
Mancos	Exc	Avg
San Miguel	Exc	Avg

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	118	157
Dolores	4	132	165
San Juan	5	114	141

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	115	111
Dolores	3	108	100
San Juan	2	115	111

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	7	9	7
Lemon	40	21	19	14
Navajo	1696	946	929	542
Vallecito	126	74	50	46
Jackson Gulch	10	10	4	4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of
February 1, 1973

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COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOWPACK ON THE GUNNISON DRAINAGE IS 103 PERCENT OF NORMAL AS OF FEBRUARY 1. HIGH ELEVATION SNOW COURSES INDICATE GOOD SNOW. THE GRAND MESA HEADWATERS FOR SURFACE CREEK HAS EXCELLENT SNOW AND SHOULD PROVIDE GOOD WATER SUPPLIES THIS SUMMER. THE SNOWPACK IN THE UNCOMPAHGRE WATERSHED IS ALSO EXCELLENT. HERE THE SNOW IS 160 PERCENT OF NORMAL. RESERVOIR STORAGE IS SLIGHTLY LESS THAN LAST YEAR. SOIL MOISTURE IS GOOD.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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DENVER, COLORADO

Issued by
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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Avg	Fair
Taylor	Avg	Fair

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	10		
Surface Creek	3		
Uncompahgre	3		

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	105	116
Surface Creek	1	124	132
Uncompahgre	1	124	132

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	336	370	--
Morrow Point	121	116	116	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Silver Jack	14	5	--	--
Taylor	106	39	67	54

+ 1953-1967 period.

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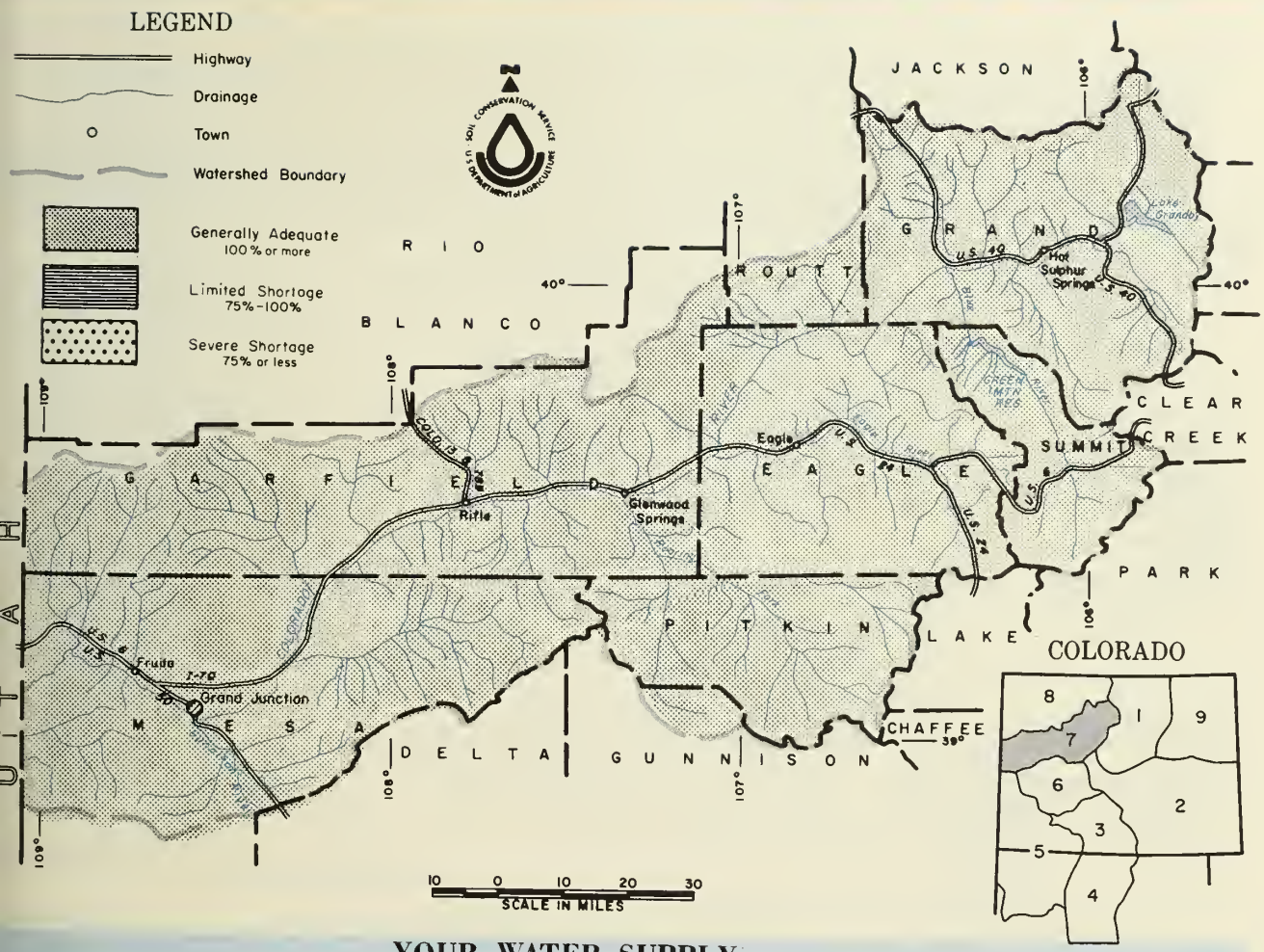
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE COLORADO RIVER SHOULD PROVIDE AT LEAST NORMAL WATER SUPPLIES THIS SUMMER. SNOWPACK VARIES FROM 97 PERCENT OF THE 15 YEAR AVERAGE ON WILLOW CREEK TO 132 PERCENT ON THE WILLIAMS FORK. THE PACK IS JUST LIGHTLY LESS THAN LAST YEAR AT THIS TIME. IRRIGATED AREAS OF THE WESTERN SLOPE ARE REPORTING EXCELLENT SOIL MOISTURE CONDITIONS. MOUNTAIN SOILS ARE REPORTED TO BE IN GOOD CONDITION.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELANO
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GLENWOOD SPRINGS, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush Creek	Exc	Avg
Eagle River	Exc	Avg
Gypsum Creek	Exc	Avg

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	94	106
Colorado	18	99	114
Plateau	3	107	124
Roaring Fork	7	89	112
Williams Fork	3	97	132
Willow	2	74	97

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	119	114
Colorado	5	122	112
Roaring Fork	1	134	150
Willow	1	107	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	219	236	236
Granby	466	353	365	254
Green Mountain	147	87	89	73
Homestake	43	21	13	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	70	74	--
Williams Fork	97	61	59	33
Willow Creek	9	7	7	--
Vega	32	13	14	11

+ 1953-1967 period.

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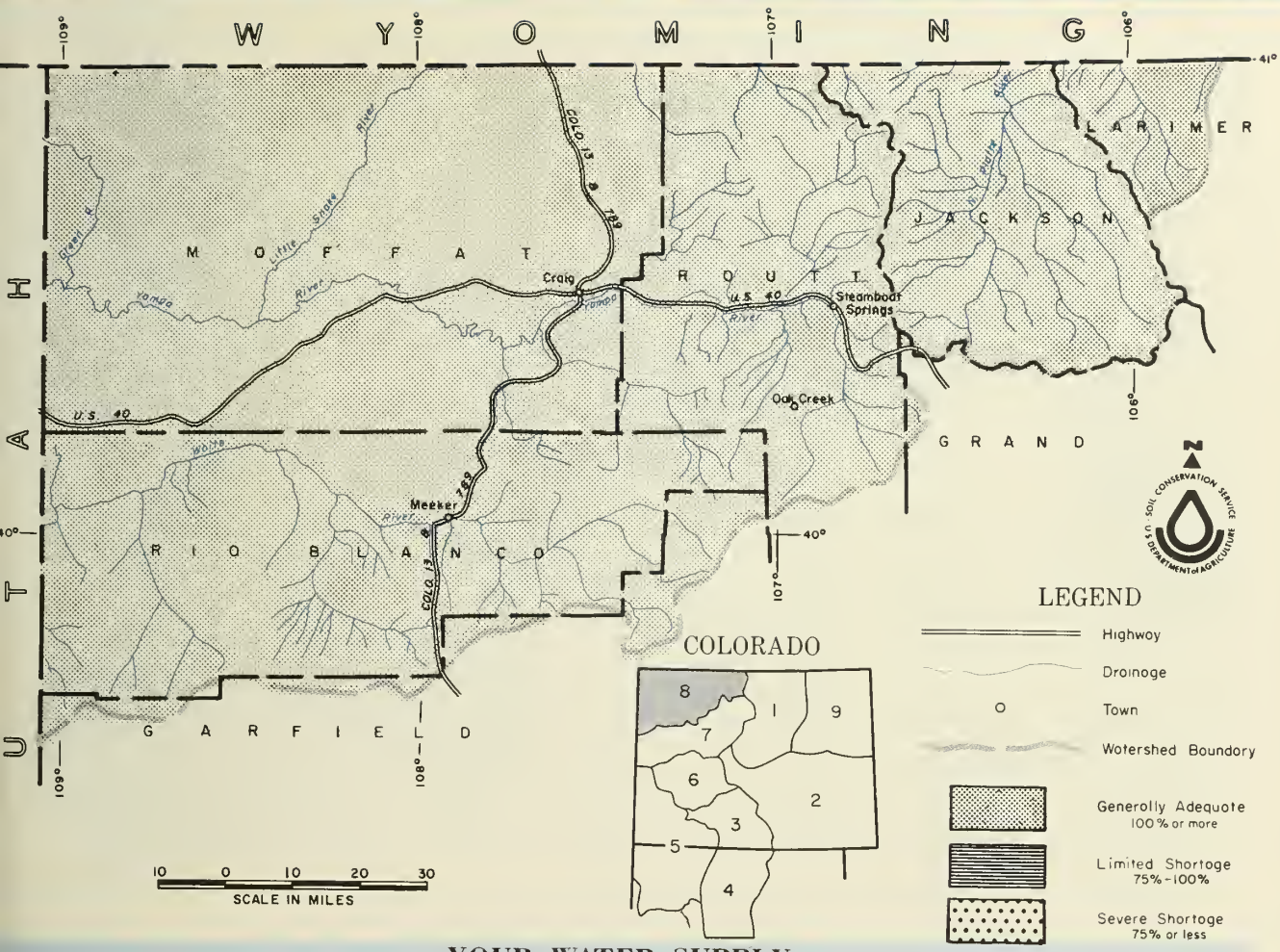
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FEBRUARY FIRST MEASUREMENTS NEAR AVERAGE SNOWPACKS ON THE YAMPA, WHITE, AND ELK RIVER DRAINAGES AND ABOVE AVERAGE ON THE LARAMIE AND NORTH PLATTE DRAINAGES. SOIL MOISTURE IN THE MOUNTAIN AREAS IS NEAR AVERAGE. IRRIGATED SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD TO EXCELLENT. AVERAGE TO ABOVE AVERAGE SNOWFALL IS NEEDED TO PROVIDE ADEQUATE WATER SUPPLIES THIS SUMMER.

This report prepared by
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GLENWOOD SPRINGS, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc	Avg
Hunt Creek	Avg	Avg
Illinois River	Exc	Avg
Michigan River	Exc	Avg
Oak Creek	Avg	Avg
Trout Creek	Avg	Avg

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	95	97
Laramie	2	125	115
North Platte	5	128	138
White	2	103	115
Yampa	5	94	109

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	2	102	93
North Platte	2	100	116
Yampa	1	107	103

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

FEBRUARY 1 MEASUREMENTS IN THE SOUTH PLATTE BASIN INDICATE NEAR AVERAGE TO ABOVE AVERAGE SNOWPACK CONDITIONS. MOUNTAIN SOIL MOISTURE IS NEAR AVERAGE WHILE IRRIGATED SOIL MOISTURE IS REPORTED AS EXCELLENT. RESERVOIR STORAGE IS SLIGHTLY BELOW LAST YEAR BUT 120 PERCENT OF THE 1953-67 AVERAGE. AVERAGE TO ABOVE AVERAGE SNOWFALL IS NEEDED TO INSURE ADEQUATE STREAMFLOW THIS SUMMER.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1973			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg	Avg
South Platte from Ft. Morgan to Sterling	Avg	Avg
South Platte below Sterling	Avg	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	93	115
Boulder	3	83	90
Cache La Poudre	7	110	136
Clear Creek	6	118	100
Saint Vrain	2	102	152
South Platte	3	100	112

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	93	102
Boulder	1	88	84
Cache La Poudre	2	102	93
Clear Creek	2	125	100
Saint Vrain	2	94	89
South Platte	2	126	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	83.7	88.2	61.9
Cheesman	79.0	43.4	79.1	45.6
Eleven Mile	97.8	93.0	76.2	72.0
Empire	37.7	25.1	19.4	22.3
Horsetooth	143.5	84.5	90.6	81.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	29.5	15.5	27.4
Julesburg	28.2	19.8	19.8	20.0
Point of Rocks	70.0	63.4	70.0	43.2
Prewitt	32.8	15.5	22.0	11.4
Riverside	57.5	49.1	40.9	38.7

+ 1953-1967 period

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1973

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/31	37	9.2	10.2	8.7
McIntyre	NS			- -	- -
Roach	1/31	53	14.0	11.1	9.8
North Platte River					
Cameron Pass	1/31	58	20.7	21.2	12.9
Columbine Lodge	1/30	43	13.1	18.3	13.6
Northgate	1/31	25	5.8	2.6	3.6
Park View	1/29	38	6.9	6.8	5.2
Willow Cr. Pass (B)	1/29	32	7.7	9.4	7.1
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/29	26	6.0	3.7	5.2
Boulder Falls	1/29	34	7.1	9.0	6.6
University Camp	1/29	38	8.8	12.1	10.9
Big Thompson River					
Deer Ridge	1/31	16	4.3	2.4	2.6
Hidden Valley	1/31	28	6.9	- -	5.9
Lake Irene (B)	1/28	46	13.3	13.5	13.0
Long's Peak	1/26	26	6.4	7.7	5.6
Two Mile	1/28	33	9.4	12.0	7.9
Cache La Poudre					
Bennett Creek	1/27	28	5.7	5.2	- -
Big South	1/31	7	1.8	0.3	1.6
Cameron Pass	1/31	58	20.7	21.2	12.9
Chambers Lake	1/31	24	7.6	4.6	5.2
Deadman Hill	1/31	37	9.2	10.2	8.7
Hour Glass Lake	NS			4.3	3.1
Joe Wright	1/31	52	16.6	15.5	- -
Lost Lake	1/31	31	8.6	9.1	7.2
Pine Creek	2/1	14	2.8	0.5	1.2
Red Reather	2/1	21	4.6	4.5	3.8
Clear Creek					
Baltimore (B)	1/29	29	6.0	3.6	5.2
Berthoud Falls	1/29	36	9.2	7.8	8.0
Empire	1/29	18	4.0	3.8	4.3
Grizzly Peak (B)	1/30	35	9.1	10.5	9.8
Loveland Lift	1/30	39	10.0	6.1	12.9
Loveland Pass	1/30	36	9.9	8.9	8.5
Saint Vrain River					
Copeland Lake	1/31	15	3.5	4.7	2.6
Ward	1/30	23	5.6	4.2	3.4
Wild Basin	NS			- -	6.9
South Platte River					
Como	1/30	23	5.7	5.4	- -
Geneva Park	1/30	17	3.5	3.0	2.7
Horseshoe Mt.	1/29	27	6.5	8.9	- -
Hoosier Pass	1/30	33	8.1	9.3	7.6
Jefferson Creek	1/30	27	6.3	5.4	5.7
Mosquito	1/30	26	6.3	8.5	- -
Trout Creek Pass	1/29	23	5.2	5.0	- -
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/30	29	4.7	1.8	- -
Cooper Hill (B)	1/30	28	6.4	7.3	- -
East Fork	1/30	24	5.7	6.5	5.6
Four Mile Park	1/31	18	3.9	4.2	3.5
Fremont Pass	1/30	36	9.6	10.4	9.5
Garfield	1/29	38	11.0	10.1	8.4
Hermit Lake	1/29	36	9.8	6.4	- -
Monarch Pass	1/29	43	11.8	10.9	10.3
Tennessee Pass	1/31	29	6.9	5.7	6.2
Twin Lakes Tunnel	1/19	29	6.1	5.5	6.0
Westcliffe	1/29	32	7.2	5.9	- -

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES) LAST YEAR	PAST RECORD: WATER CONTEN (INCHES) AVG 53 67
Cucharas River					
Blue Lakes	1/29	23	4.1	0.0	2.3
Cucharas Pass	1/29	35	7.3	3.6	- -
LaVeta Pass (B)	1/29	35	7.5	7.5	6.2
Purgatorie River					
Bourbon	1/29	30	9.3	5.0	- -
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/26	33	8.6	2.8	3.9
Summitville	1/30	59	18.5	16.9	11.6
Conejos River					
Cumbres	2/1	54	15.1	13.0	13.2
LaManga	2/1	59	16.7	12.3	- -
Platoro	1/30	51	16.3	12.5	12.9
River Springs	1/31	33	6.6	2.6	- -
Culebra River					
Brown Cabin	1/29	28	6.7	3.7	- -
Cottonwood (B)	1/29	27	6.2	- -	- -
Culebra	1/30	35	9.3	8.3	5.7
LaVeta Pass (B)	1/29	35	7.5	7.5	6.2
Trinchera (B)	1/30	33	8.8	7.6	- -
Rio Grande					
Cochetopa Pass	1/29	26	6.0	4.2	3.4
Grayback	1/30	52	16.0	- -	- -
Hiway	1/30	63	22.4	19.2	15.7
Lake Humphrey	1/31	31	7.3	7.5	5.6
Love Lake	1/29	39	10.0	10.4	- -
Pass Creek	1/30	44	13.9	10.5	8.9
Pool Table	1/29	24	4.4	6.2	6.1
Porcupine	1/29	34	8.3	11.6	8.2
Santa Maria	1/28	24	4.7	5.4	3.4
Upper Rio Grande	1/29	35	9.3	10.2	5.4
Wolf Creek Pass	1/30	67	23.8	20.9	17.8
Wolf Cr. Sum. (B)	1/30	77	27.6	25.9	17.7
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	1/29	23	4.4	2.7	2.6
Rio Chama					
Bateman	1/31	36	9.0	6.8	7.0
Capulin Peak	1/29	23	5.7	4.1	3.3
Chama Divide	1/26	19	3.9	2.7	3.3
Chamita	1/26	31	7.5	5.4	5.0
Rio Grande					
Aspen Grove	NS			- -	- -
Big Tesuque	1/24	28	7.0	5.1	3.7
Blue Bird Mesa	1/30	15	4.2	2.8	3.8
Cordova	NS			- -	6.3
Elk Cabin	1/26	18	4.3	3.7	2.9
La Cueva	1/15	27	6.6	5.5	- -
Hopewell	1/31	46	11.8	10.3	- -
Pajarito Peak	1/29	8	1.8	1.3	1.3
Payrole	1/26	30	7.6	4.8	5.9
Quemazon	1/29	32	7.6	7.0	6.5
Rio En Medio	1/24	38	9.2	7.8	6.1
Sandoval	1/26	20	4.4	5.9	3.7
Taos Canyon	1/30	19	5.2	2.0	3.4
Teakettle	1/30	30	7.9		
Tres Ritos	1/27	31	6.0	3.2	3.5
Rio Hondo					
Twinning	1/30	26	7.1	5.4	- -
Red River					
Hematite Park	1/29	21	5.4	2.7	3.4
Red River	1/29	21	5.3	5.5	4.4

NOTE:

NS - No Survey
(B) - On adjacent drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1973

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches): Last Year	Past Record: Water Content (Inches): Avg 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/29	40	12.7	9.9	8.0
Lemon	1/30	34	10.2	7.8	- -
Mineral Creek	1/29	45	14.1	11.5	8.9
Molas Lake	1/29	35	10.6	10.9	8.4
Purgatory	1/29	64	20.6	18.4	- -
Red Mountain Pass	1/29	77	27.8	23.1	17.0
Silverton Sub-Sta.	1/29	33	9.2	6.9	4.8
Spud Mountain	1/29	63	22.8	20.0	15.0
Dolores River					
Lizzard Head	1/29	45	14.3	12.5	9.4
Lone Cone	1/29	44	12.7	12.8	- -
Rico	1/29	33	9.9	5.8	5.0
Telluride	1/30	32	7.6	5.4	4.5
Trout Lake	1/30	41	12.0	9.4	7.6
San Juan River					
Chama Divide (B)	1/26	19	3.9	2.7	3.3
Chamita (B)	1/26	31	7.5	5.4	5.0
Upper San Juan	1/30	73	26.5	23.3	19.4
Wolf Cr. Pass (B)	1/30	67	23.8	20.9	17.8
Wolf Cr. Summit	1/30	77	27.6	25.9	17.7
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/30	52	16.6	18.2	11.5
Blue Mesa	NS			- -	- -
Butte	1/31	30	7.7	10.4	- -
Cochetopa Pass (B)	1/29	26	6.0	4.2	3.4
Crested Butte	1/29	35	8.4	9.1	7.5
Keystone	1/30	48	14.9	14.9	12.6
Lake City	1/26	28	6.3	7.6	- -
Mesa Lakes (B)	1/29	46	13.0	11.5	10.3
McClure Pass	1/29	43	13.5	14.3	11.6
Park Cone	1/30	28	5.8	7.0	6.2
Park Reservoir	1/30	57	17.1	16.1	14.1
Porphyry Creek	1/29	49	13.2	10.5	10.1
Tomichi	1/29	39	11.3	10.1	7.5
Surface Creek					
Alexander Lake	1/30	52	16.6	18.2	11.5
Mesa Lakes (B)	1/29	46	13.0	11.5	10.3
Park Reservoir	1/30	57	17.1	16.1	14.1
Uncompahgre River					
Ironton Park	1/29	41	11.6	6.7	7.6
Red Mountain Pass	1/29	77	27.8	23.1	17.0
Telluride (B)	1/30	32	7.6	5.4	4.5
COLORADO BASIN					
Blue River					
Blue River	1/30	27	6.0	5.4	5.1
Fremont Pass	1/30	36	9.6	10.4	9.5
Frisco	1/30	22	4.4	4.8	4.3
Grizzly Peak	1/30	35	9.1	10.5	9.8
Hoosier Pass (B)	1/30	33	8.1	9.3	7.6
Shrine Pass	1/30	41	12.0	11.4	9.6
Snake River	1/30	22	4.5	4.6	4.7
Summit Ranch	1/30	21	4.6	5.6	4.4

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches): Last Year	Past Record: Water Content (Inches): Avg 53 67
Colorado River					
Arrow	1/30	34	8.7	9.0	6.4
Berthoud Pass	1/30	38	10.0	9.7	8.3
Berthoud Summit	1/29	44	11.3	10.0	10.8
Cooper Hill	1/30	28	6.4	7.3	- -
Fiddler Gulch	NS			- -	8.7
Glenmar Ranch	1/29	31	6.8	7.0	4.7
Gore Pass	1/30	27	7.4	7.1	5.9
Grand Lake	1/29	26	5.1	5.3	4.8
Lake Irene	1/28	46	13.3	13.5	13.0
Lapland	1/29	26	5.9	7.7	- -
Lulu	NS			- -	- -
Lynx Pass	1/30	33	8.8	8.0	6.6
McKenzie Gulch	1/29	26	5.1	6.2	3.4
Middle Fork	1/29	31	6.8	6.4	5.4
Milner	1/28	32	7.8	8.4	8.7
North Inlet	1/29	25	5.5	5.5	5.3
Pando	1/30	25	6.3	8.1	5.7
Phantom Valley	1/28	28	6.9	5.6	6.1
Ranch Creek	1/30	30	6.8	6.5	5.1
Tennessee Pass (B)	1/31	29	6.9	5.7	6.2
Vail Pass	1/30	38	10.4	11.9	10.0
Vasquez	1/26	33	7.4	8.7	6.9
Roaring Fork River					
Aspen	1/28	41	11.4	12.3	8.9
Chapman	1/29	36	9.6	11.8	- -
Independence Pass	1/19	29	6.1	10.0	9.5
Ivanhoe	1/30	45	12.3	13.0	9.6
Kiln	1/30	33	8.3	9.6	- -
Last Chance	1/30	28	7.5	9.0	- -
Lift	1/28	38	10.2	11.0	10.3
McClure Pass	1/29	43	13.5	14.3	11.6
Nast	1/30	22	5.4	5.3	3.7
North Lost Trail	1/29	39	11.6	13.6	9.5
Williams Fork River					
Glenmar Ranch	1/29	31	6.8	9.6	4.7
Jones Pass	1/29	39	10.0	8.4	7.8
Middle Fork	1/29	31	6.8	6.4	5.4
Willow Creek					
Granby	1/29	19	3.7	6.1	4.6
Willow Creek Pass	1/29	32	7.7	9.4	7.1
Plateau Creek					
Mesa Lakes	1/29	46	13.0	11.5	10.3
Park Reservoir	1/30	57	17.1	16.1	14.1
Trickle Divide	1/30	59	19.3	18.6	15.3
YAMPA BASIN					
Elk River					
Clark	1/26	31	8.2	7.4	8.3
Elk River	1/26	37	10.6	12.4	11.1
Hahn's Peak	1/26	33	9.1	9.3	- -
White River					
Burro Mountain	1/30	43	13.5	11.9	10.7
Rio Blanco	1/29	36	9.0	10.0	8.9
Yampa River					
Bear River	NS			- -	- -
Buffalo Pass	1/29	72	25.2		
Columbine Lodge (B)	1/30	43	13.1	18.3	13.6
Dry Lake	1/29	42	12.4	13.1	12.2
Lynx Pass (B)	1/30	33	8.8	8.0	6.6
Rabbit Ears	1/26	56	17.1	17.4	15.9
Yampa View	1/26	39	10.9	9.8	8.8

NOTE:
NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/8/72	11.1	7.7	6.8	6.4
Willow Pass	10/25/72	9.5	7.5	8.3	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/1/72	6.9	3.1	3.5	3.7
Big Thompson River					
Beaver Dam	10/1/72	7.1	4.5	5.3	3.8
Guard Station	10/1/72	6.9	3.2	3.2	3.4
Two Mile	10/1/72	9.1	5.3	5.5	5.5
Clear Creek					
Clear Creek	12/28/72	9.5	7.1	5.3	7.1
Hoop Creek	10/25/72	4.9	2.8	2.6	2.9
Cache La Poudre River					
Feather	10/1/72	10.1	4.5	4.7	4.5
Laramie Road	10/1/72	12.4	6.9	6.5	7.8
South Platte River					
Hoosier Pass	10/25/72	7.8	5.5	4.4	4.9
Kenosha Pass	10/25/72	4.4	3.3	2.6	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/18/72	6.7	5.0	4.2	3.9
Leadville	10/16/72	7.8	4.0	3.4	4.2
Twin Lakes Tunnel	10/16/72	4.5	2.4	0.9	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/9/72	10.7	4.6	5.0	5.5
Rio Grande					
Bristol View	11/10/72	6.1	4.1	3.1	3.9
LaVeta	11/9/72	11.9	6.9	7.1	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	10/4/72	6.7	2.6	4.5	2.5
Chamita	10/11/72	8.0	1.5	4.1	2.4
Rio Grande					
Aqua Piedra	11/13/72	7.2	4.5	6.0	3.1
Big Tesuque	11/8/72	3.7	3.0	0.8	1.5
Rio En Medio	11/8/72	3.5	2.1	0.8	1.4
Taos Canyon	11/2/72	3.3	2.1	2.3	2.3
Red River					
Red River Summit	11/2/72	4.8	1.6	1.8	2.2

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/8/72	9.1	7.2	5.5	6.3
Mineral Creek	11/8/72	5.7	3.2	3.1	3.7
Molas Lake	11/8/72	9.4	5.8	5.5	4.6
Dolores River					
Dolores	11/1/72	19.6	11.4	10.6	6.7
Lizzard Head	11/1/72	11.8	4.1	3.9	8.3
Rico	11/1/72	13.8	9.3	8.5	9.9
GUNNISON BASIN					
Gunnison River					
King	10/18/72	3.3	2.2	2.1	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	10/25/72	4.2	3.2	2.7	2.8
Colorado River					
Berthoud Pass	10/25/72	3.9	3.2	2.5	2.8
Gore	10/31/72	4.9	3.1	3.3	2.5
Grand Mesa	11/2/72	12.5	12.3	9.9	9.3
Ranch Creek	10/25/72	8.7	5.4	4.7	6.0
Vail	12/28/72	12.3	6.9	4.9	6.9
Roaring Fork River					
Placita	11/8/72	9.3	7.8	5.8	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/8/72	19.0	12.1	11.3	11.8

ALL PROFILES 4 FEET DEEP

USDA SCS PORTLAND OREG. 1987 MP-C-1086

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
MAR. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER [illegible]-180-4

USDA SCS PORTLAND OREG 1973

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Puebla, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgataire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

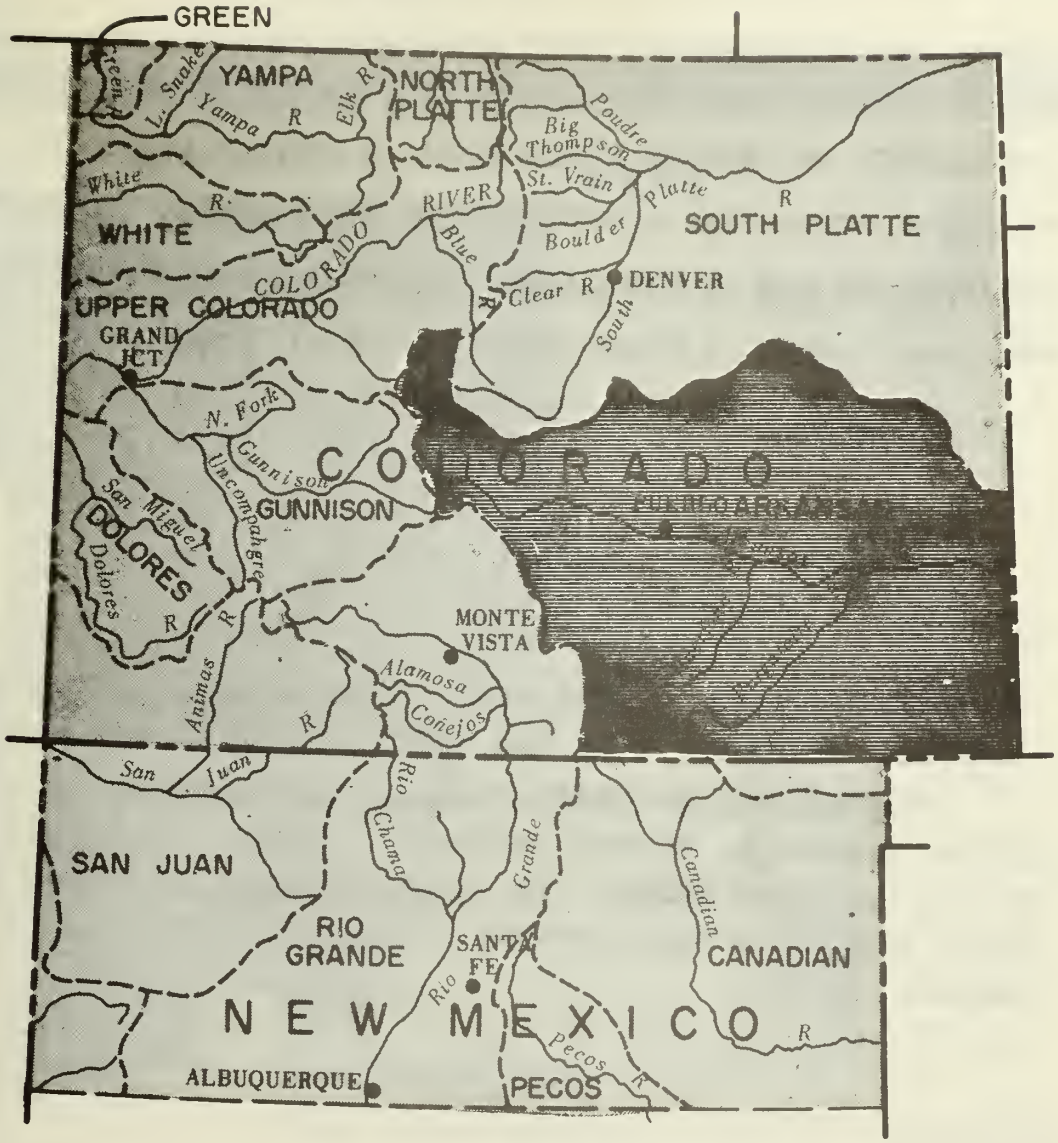
APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

March 1, 1973



GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
March 1, 1973

SNOWFALL DURING FEBRUARY WAS CONSIDERABLY LESS THAN NORMAL. DESPITE THE BELOW AVERAGE MONTH THE SNOWPACK IS NEAR NORMAL OR ABOVE IN BOTH STATES. NORTHERN NEW MEXICO AND SOUTHERN COLORADO HAVE THE BEST SNOWPACK. SOIL MOISTURE CONDITIONS ARE GOOD IN BOTH STATES. CARRY-OVER STORAGE IS RELATIVELY GOOD. MORE SNOW IS NEEDED TO ASSURE ADEQUATE WATER THIS SUMMER.

COLORADO WATER SUPPLY FORECASTS WERE LOWERED OVER THE ENTIRE STATE DUE TO THE POOR SNOWFALL DURING FEBRUARY. LAST MONTH SNOW WAS ONLY ABOUT 25 PERCENT OF THE 15 YEAR AVERAGE IN SOME AREAS. WATER SUPPLIES SHOULD STILL BE NEARLY ADEQUATE IF SNOWFALL DURING THE REMAINDER OF THE YEAR IS AT LEAST AVERAGE. THE ARKANSAS DRAINAGE HAS ONLY 92 PERCENT OF AVERAGE SNOWPACK AND POOR CARRY-OVER STORAGE. SOIL MOISTURE IS REPORTED AS GOOD OVER THE STATE.

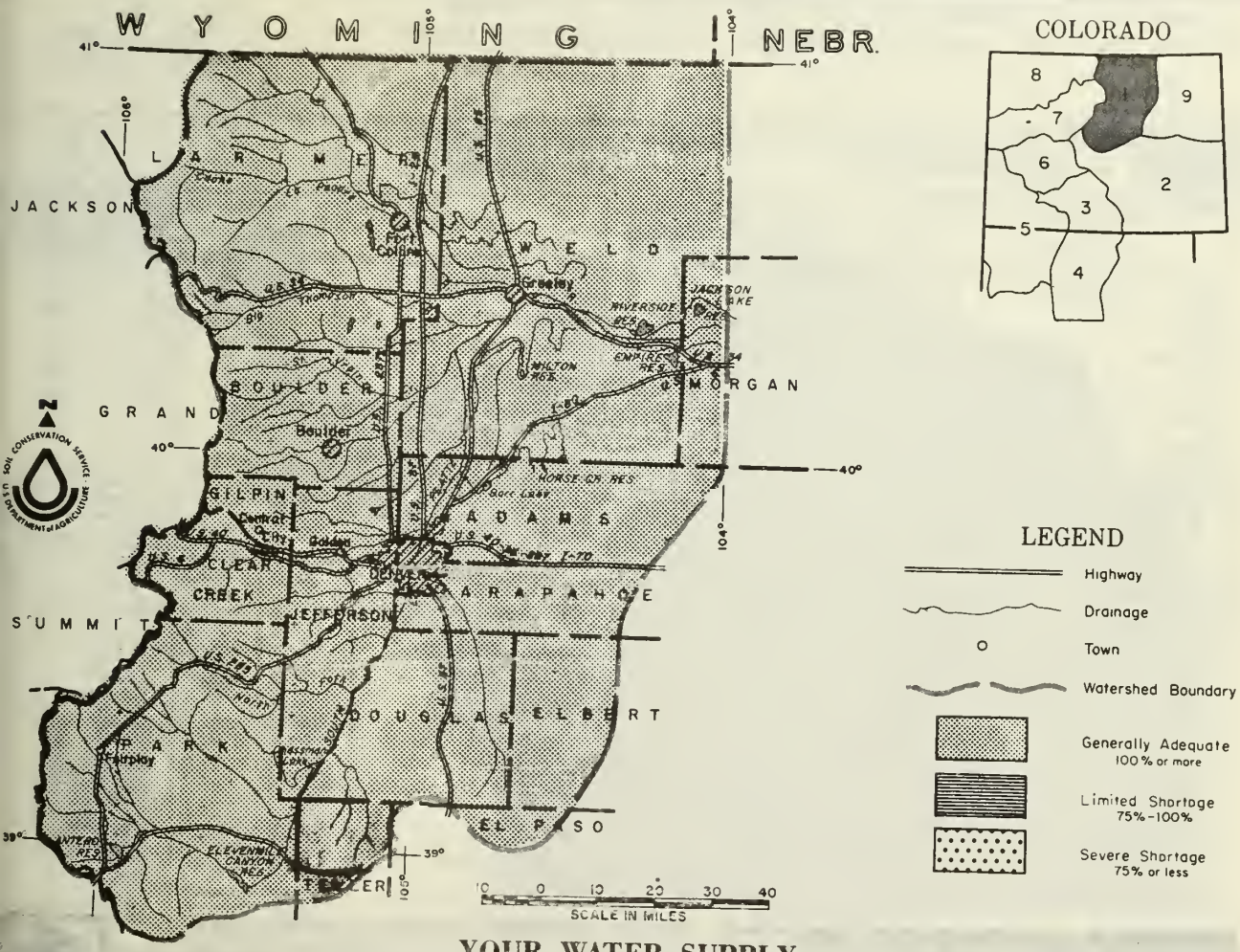
NEW MEXICO THE SNOWFALL DURING FEBRUARY WAS LESS THAN NORMAL, BUT THE EARLY SNOWS STILL BRING THE SNOWPACK ABOVE NORMAL. FORECASTS WERE LOWERED SLIGHTLY. IF SUBSEQUENT SNOWFALL IS ABOVE NORMAL, STREAMFLOWS SHOULD BE ADEQUATE FOR THE FIRST TIME IN SEVERAL YEARS. FALL PRECIPITATION ADDED NEEDED MOISTURE TO THE IRRIGATED VALLEYS AND INCREASED STORAGE IN SOME RESERVOIRS.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE SOUTH PLATTE DRAINAGE WAS CONSIDERABLY BELOW NORMAL DURING FEBRUARY. IN A FEW CASES WE HAVE LESS SNOW NOW THAN FEBRUARY 1. WATER SUPPLY FORECASTS WERE LOWERED PROPORTIONATELY. SUPPLIES SHOULD STILL BE GOOD IF WE HAVE NORMAL SNOWFALL FOR THE REMAINDER OF THE YEAR. SOIL MOISTURE CONDITIONS IN THE MOUNTAINS IS NEAR NORMAL. SOIL MOISTURE IN THE IRRIGATED AREAS ARE REPORTED TO BE GOOD. RESERVOIR CARRY-OVER STORAGE IS SLIGHTLY LESS THAN LAST YEAR, BUT IS STILL 125 PERCENT OF 1953-67 AVERAGE.

This report prepared by

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DENVER, COLORADO
DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (1)	95	95	100
Boulder at Orodell	48	98	49
Cache La Poudre at Canyon Mouth (2)	210	97	215
Clear Cr. at Golden (3)	115	97	119
Saint Vrain at Lyons (4)	65	93	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg	Avg
Coal Creek	Avg	Avg
North Fork of South Platte	Avg	Avg
North Fork of Cache La Poudre	Avg	Avg
Ralston Creek	Avg	Avg
Rock Creek	Avg	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow r diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	83	94
Boulder	3	76	86
Cache La Poudre	8	97	108
Clear Creek	5	86	78
Saint Vrain	3	74	85
South Platte	3	85	93

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	93	102
Boulder	1	88	84
Cache La Poudre	2	102	93
Clear Creek	2	125	100
Saint Vrain	2	94	89
South Platte	2	126	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	26.5	24.0	18.9
Black Hollow	8.0	4.4	4.2	3.3
Boyd Lake	44.0	37.5	36.1	27.8
Cache La Poudre	9.5	7.8	7.7	7.0
Carter Lake	108.9	98.4	97.5	71.3
Chambers Lake	8.8	4.4	1.6	2.7
Cheesman	79.0	41.4	79.1	46.4
Cobb Lake	34.0	21.0	20.5	9.9
Eleven Mile	97.8	90.9	73.5	72.0
Fossil Creek	11.6	8.8	8.8	6.1
Gross	43.1	24.0	28.9	24.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average
Halligan	6.4	5.1	5.6	3.8
Horsetooth	143.5	103.5	106.5	93.0
Lake Loveland	14.3	8.7	12.2	8.
Lone Tree	9.2	8.5	7.9	6.
Mariano	5.4	5.1	5.3	3.
Marshall	10.3	3.5	6.1	2.
Marston	18.0	14.5	14.8	14.
Milton	24.4	13.3	15.9	9.
Standley	42.0	20.5	24.3	9.
Terry Lake	8.2	5.8	5.7	4.
Union	12.7	10.4	12.1	7.
Windsor	18.6	12.7	13.5	8.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW. MEXICO

YOUR WATER SUPPLY

SNOWFALL DURING FEBRUARY WAS BELOW AVERAGE AND STREAMFLOW FORECASTS HAVE BEEN REDUCED ACCORDINGLY. FORECASTS FOR THE APRIL THROUGH SEPTEMBER PERIOD RANGE FROM 90 TO 97 PERCENT OF THE 1953-67 AVERAGE. RESERVOIR STORAGE IS ONLY 80 PERCENT OF AVERAGE EXCLUDING JOHN MARTIN AND TURQUOISE RESERVOIRS, WHICH HAVE 17,000 AND 49,000 ACRE FEET RESPECTIVELY. THIS IS ABOUT 80 PERCENT OF LAST YEAR. ABOVE AVERAGE SNOWFALL IS NEEDED TO INSURE ADEQUATE WATER SUPPLIES THIS SUMMER.

This report prepared by
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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	290	97	298
Arkansas at Salida (1)	300	97	309
Cucharas nr LaVeta	11	92	12
Purgatoire at Trinidad	40	90	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, E cellent" With Respect to Usual Suppl

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg	Fair
Fountain Creek	Avg	Fair
Grape	Avg	Fair
Hardscrable Creek	Avg	Fair
Huerfano	Avg	Fair
Monument Creek	Avg	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	89	92
Cucharas and Purgatoire	3	100	100

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTUR as PERCENT OF: Last Year	Average
Arkansas	3	134	110
Cucharas and Purgatoire	1	97	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	0.0	13.5	11.5
Clear Creek	11.4	5.7	6.2	6.6
Cucharas	40.0	0.0	0.0	6.9
Great Plains	150.0	25.2	42.0	35.4
Horse Creek	26.9	0.0	0.0	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Avera
John Martin	353.9	17.1	22.6	85
Meredith	41.9	22.5	8.5	9
Model	15.0	---	1.0	3
Turquoise	130.0	48.9	58.7	7
Twin Lakes	57.9	25.5	30.8	20

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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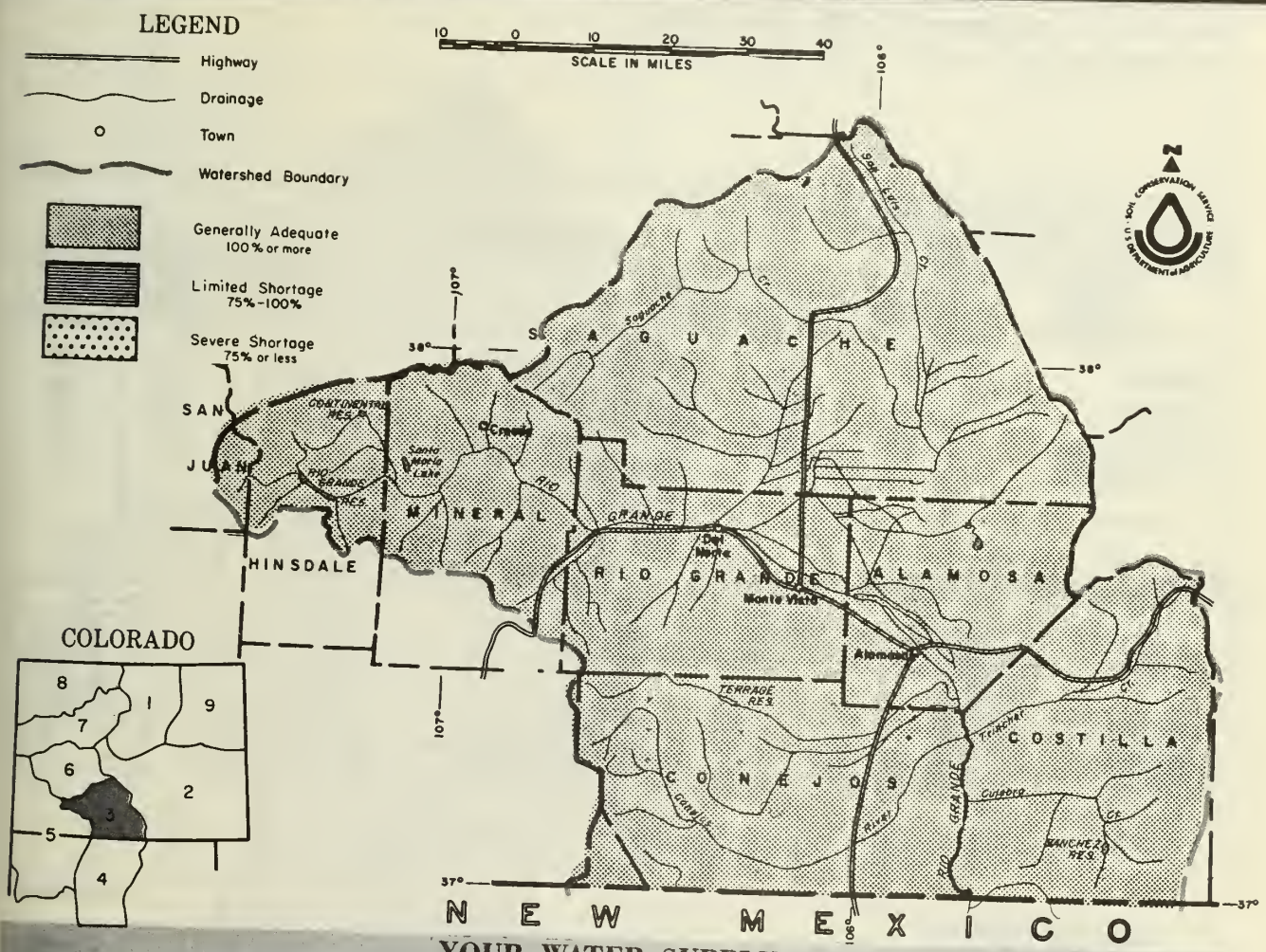

YOUR WATER SUPPLY

WATER SUPPLY FORECASTS ARE ABOVE AVERAGE IN ALL TRIBUTARIES OF THE RIO GRANDE. HOWEVER, SNOWFALL DURING FEBRUARY WAS BELOW AVERAGE. IF AVERAGE SNOWFALL CONTINUES DURING THE REMAINDER OF THE SEASON WATER SUPPLIES SHOULD BE ADEQUATE. RESERVOIR STORAGE IS 98 PERCENT OF THE 1953-67 AVERAGE AND SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE NEAR AVERAGE.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	80	129	62
Conejos nr Mogote (1)	225	124	182
Culebra at San Luis (2)	19	100	19
Rio Gr. at 30 Mile Bridge (3)	140	120	117
Rio Gr. nr Del Norte(3)	500	114	438
So. Fork at So. Fork	135	123	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc	Exc
Sangre de Cristo Cr.	Exc	Exc
Trinchera Creek	Exc	Exc

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	169	154
Conejos	3	161	123
Culebra	2	95	110
Rio Grande	10	117	127

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	1	92	84
Conejos	1	92	84
Culebra	2	96	90
Rio Grande	2	108	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	4.8	5.8	4.4
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	18.4	16.2	12.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	5.9	10.0	10.6
Santa Maria	45.0	4.8	6.4	5.5
Terrace	17.7	5.7	6.0	3.7

+ 1953-1967 period.

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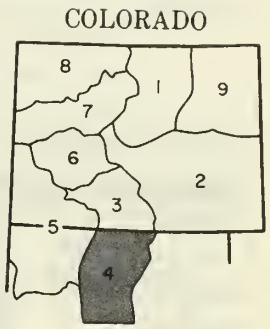
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

SNOWPACK ON THE RIO GRANDE DRAINAGE IN NEW MEXICO IS STILL 137 PERCENT OF THE 1953-67 AVERAGE DESPITE BELOW AVERAGE SNOWFALL DURING FEBRUARY. IF SNOWFALL CONTINUES AT LEAST AT A NORMAL RATE, WATER SUPPLIES SHOULD BE GENERALLY ADEQUATE. CARRY-OVER STORAGE IS GOOD DUE TO THE FALL RAINS. SOIL MOISTURE IS REPORTED TO BE EXCELLENT.

This report prepared by

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SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	23	128	18
Pecos at Pecos	52	127	41
Rio Chama to El Vado	230	122	188
Rio Gr. at Otowi (2)	600	117	513
Rio Gr. at San Mar (2)	420	126	334
Rio Hondo nr Valdez	17	113	15
Red R. at mouth nr Questa	40	125	32

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc	Avg
Jemez River	Exc	Avg
Mora River	Exc	Avg
Nambe Creek	Exc	Avg
Rio Ojo Caliante	Exc	Avg
Rio Pueblo de Taos	Exc	Avg
Santa Fe Creek	Exc	Avg

The forecast of the Rio Grande at San Marcial is 65% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	410	180
Rio Chama	4	214	119
Rio Grande, NM	12	190	137
Rio Hondo	1	185	---
Red River	2	148	138

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	76	88
Rio Chama	1	170	170
Rio Grande	2	110	123
Red River	1	63	79

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	87	52	76
Caballo	344	73	17	81
Conchas	273	143	79	163
Elephant Butte	2195	382	223	370

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	23	1	4
McMillen-Avalon	32	33	13	20

+ 1953-1967 period.

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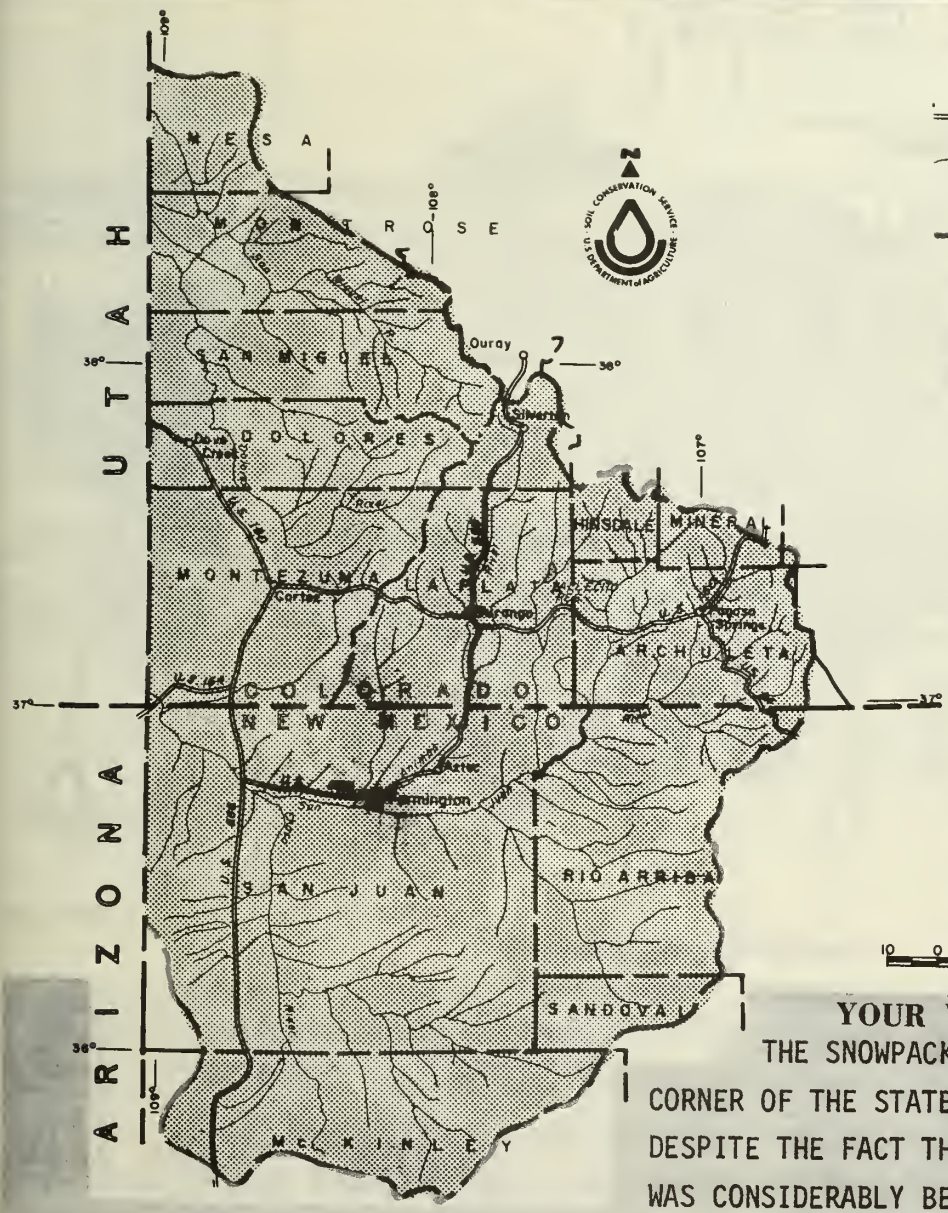
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
March 1, 1973

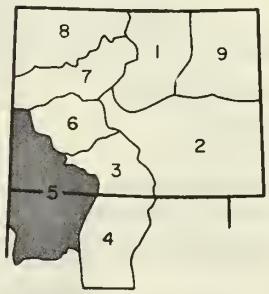
U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

THE SNOWPACK IN THE SOUTHWEST CORNER OF THE STATE IS ABOVE NORMAL DESPITE THE FACT THAT FEBRUARY SNOWFALL WAS CONSIDERABLY BELOW NORMAL. CURRENT SNOW RANGES FROM 131 PERCENT OF THE 1953-67 AVERAGE ON THE ANIMAS TO 144 PERCENT ON THE DOLORES. CARRY-OVER STORAGE IS CONSIDERABLY BETTER THAN NORMAL. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD AND MOUNTAIN SOIL MOISTURE IS ABOVE NORMAL.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	525	128	409
Dolores at Dolores	290	126	231
La Plata at Hesperus	28	117	24
Los Pinos at Bayfield (1)	220	113	194
Piedra Cr. at Piedra	195	120	163
San Juan at Carracas	490	129	379
Inflow to Navajo Res. (1) (Apr-Jul)	800	129	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc	Exc
Mancos	Exc	Exc
San Miguel	Exc	Exc

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	131	133
Dolores	4	144	140
San Juan	5	139	128

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	115	111
Dolores	3	108	100
San Juan	2	115	111

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	7	9	7
Lemon	40	21	19	15
Navajo	1036	883	880	537
Vallecito	126	74	50	48
Narraguinnep		16		
Jackson Gulch		5		

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS ARE ABOVE AVERAGE ON ALL TRIBUTARIES IN THE GUNNISON DRAINAGE EVEN THOUGH SNOWFALL WAS BELOW AVERAGE DURING FEBRUARY. FORECASTS FOR THE APRIL THROUGH SEPTEMBER PERIOD RANGE FROM 102 TO 120 PERCENT. WITH AVERAGE SNOWFALL THE REMAINDER OF THE SEASON THE WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. RESERVOIR STORAGE IN BLUE MESA AND MORROW POINT RESERVOIRS ARE ABOUT THE SAME AS LAST YEAR. TAYLOR PARK RESERVOIR CONTAINS 40,000 ACRE FEET COMPARED TO LAST YEAR'S 68,000 ACRE FEET.

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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison R. inflow to Blue Mesa Res. (1)	780	102	767
Gunnison nr Gr. Junction (2)	1350	119	1137
N. Fork of Gunnison (3)	300	117	257
Surface Cr. nr Cedaridge	19	119	16
Uncompahgre at Colona	155	120	129

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc	Avg

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Marrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	113	113
Surface Creek	3	113	115
Uncompahgre	3	129	129

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	105	116
Surface Creek	1	124	132
Uncompahgre	1	124	132

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	941	315	323	---
Morrow Point	121	115	116	---
Taylor	106	40	68	56

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO

as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE LOWERED DUE TO THE MUCH BELOW NORMAL SNOWFALL DURING FEBRUARY. THE SUMMER FLOW OUTLOOK IS STILL RELATIVELY GOOD AND WATER SUPPLIES SHOULD BE ADEQUATE IF WE HAVE AT LEAST AVERAGE SNOWFALL FOR THE REMAINDER OF THE YEAR. CURRENT SNOWPACK RANGES FROM 84 PERCENT OF THE 15 YEAR AVERAGE ON WILLOW CREEK TO 113 PERCENT ON THE PLATEAU CREEK. MOUNTAIN SOILS ARE WET AND VALLEY IRRIGATORS REPORT SOILS IN GOOD CONDITION. CARRY-OVER STORAGE IS SLIGHTLY BETTER THAN AVERAGE.

This report prepared by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

DENVER, COLORADO

GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
BlueR. inflow to Dillon	115	75	153
Blue abv Gr. Mt. (1)	185	78	236
Colo. Rv. inflow to Granby Res. (2)	205	94	219
Colo. Rv. nr Dotsero (3)	1350	98	1375
Roar.Fk. at Gl. Spr. (4)	700	101	692
Wm Fk. nr Par. (5)	60	100	60
Will. Cr. inflow to Will. Cr. Res.	42	91	46
Colo. nr Cameo (6)	2100	95	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Avg	Fair
Eagle River	Avg	Fair
Gypsum Creek	Avg	Fair

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Gran as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Dit and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus ch in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	76	83
Colorado	21	84	95
Plateau	3	119	113
Roaring Fork	7	93	98
Williams Fork	3	99	111
Willow	2	71	84

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	119	114
Colorado	5	122	112
Roaring Fork	1	134	150
Willow	1	107	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	219	236	234
Granby	466	407	341	233
Green Mountain	147	85	79	63
Homestake	43	18	10	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	62	66	--
Williams Fork	97	57	55	27
Willow Creek	9	9	8	6
Vega	32	14	14	11

+ 1953-1967 period

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"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

SNOWPACK REMAINS NEAR NORMAL ON THE YAMPA, WHITE AND NORTH PLATTE WATERSHEDS. THE WHITE RIVER INDICATES 106 PERCENT OF THE 15 YEAR NORMAL AND HAS THE BEST SNOW IN THE AREA. FORECASTS FELL SLIGHTLY DURING THE MONTH DUE TO THE BELOW NORMAL SNOWFALL DURING FEBRUARY. IF SNOW CONTINUES TO FALL AT LEAST AT A NORMAL RATE WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER. ALTHOUGH COLD TEMPERATURES EXISTED DURING MOST OF THE MONTH, SOIL MOISTURE CONDITIONS REMAINED GOOD. MOUNTAIN SOIL MOISTURE STORAGE REMAINS ABOUT NORMAL FOR THIS TIME OF YEAR.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELANO
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by
M. O. BUROICK---STATE CONSERVATIONIST
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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	170	90	191
Laramie at Jelm	95	95	104
Little Snake at Lily	250	90	277
No. Platte at Northgate	205	95	215
White nr Meeker	270	92	293
Yampa nr Maybell	780	91	853
Yampa at Steamboat Springs	250	96	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg	Fair
Hunt Creek	Avg	Fair
Illinois River	Avg	Fair
Michigan River	Avg	Fair
Oak Creek	Avg	Fair
Trout Creek	Avg	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average +
Elk	2	89	81
Laramie	2	86	93
North Platte	5	88	102
White	2	106	94
Yampa	5	87	92

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average +
Laramie	2	102	93
North Platte	2	100	116
Yampa	1	107	103

+ 1953-1967 perio

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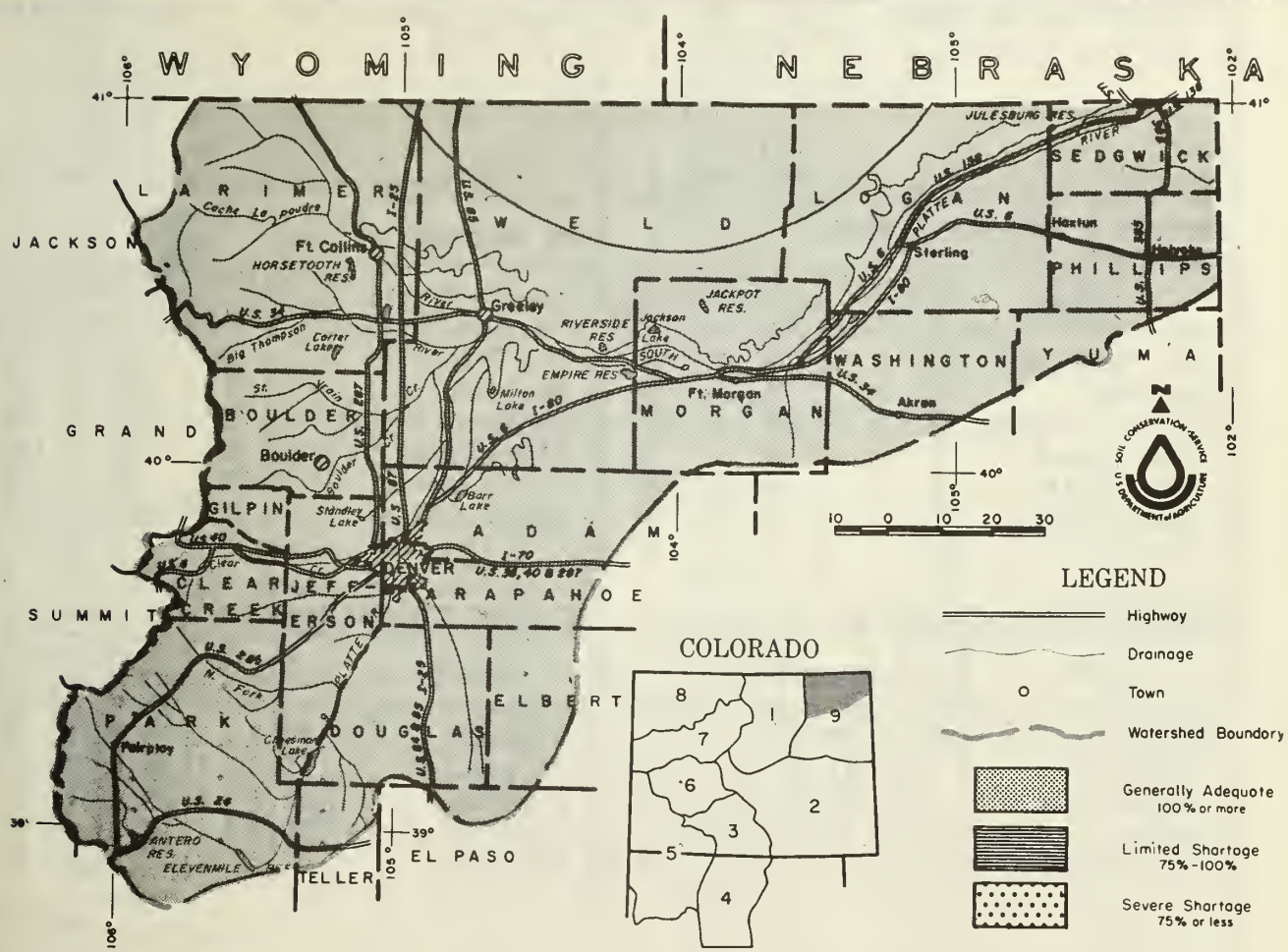
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

March 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL WAS LIGHT DURING FEBRUARY OVER THE ENTIRE SOUTH PLATTE DRAINAGE. STREAMFLOW FORECASTS WERE DROPPED CORRESPONDINGLY. FORECASTS STILL INDICATE NEAR NORMAL WATER SUPPLIES IF SNOWFALL IS NORMAL FOR THE REMAINDER OF THE YEAR. RESERVOIR CARRY-OVER STORAGE IS STILL 117 PERCENT OF THE 15 YEAR AVERAGE AND WILL PROVIDE EXCELLENT SUPPLEMENTAL SUPPLIES. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE EXCELLENT.

This report prepared by

JACK N WASHICHEK and RONALD E. MORELAND
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DENVER, COLORADO

Issued by

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DENVER, COLORADO
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	95	95	100
Boulder at Orodell	48	98	49
Cache La Poudre at Canyon Mouth (2)	210	97	215
Clear Cr. at Golden(3)	115	97	119
Saint Vrain at Lyons (4)	65	93	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg	Fair
South Platte from Ft. Morgan to Sterling	Avg	Fair
South Platte below Sterling	Avg	Fair

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	83	94
Boulder	3	76	86
Cache La Poudre	8	97	108
Clear Creek	5	86	78
Saint Vrain	3	74	85
South Platte	3	85	93

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	93	102
Boulder	1	88	84
Cache La Poudre	2	102	93
Clear Creek	2	125	100
Saint Vrain	2	94	89
South Platte	2	126	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	98.4	97.5	71.3
Cheesman	79.0	41.4	79.1	46.4
Eleven Mile	97.8	90.9	73.5	72.0
Empire	37.7	26.5	23.7	27.2
Horsetooth	143.5	103.5	106.5	93.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	29.7	32.9	30.8
Julesburg	28.2	19.8	19.8	20.7
Prewitt	32.8	18.1	22.6	14.5
Point of Rocks	70.0	70.3	69.9	49.9
Riverside	57.5	53.2	55.4	44.6

+ 1953-1967 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1973

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches): Last Year	Past Record: Water Content (Inches): Avg 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/27	37	10.9	13.4	12.6
McIntyre	NS			---	---
Roach	2/26	51	14.3	16.0	14.4
North Platte River					
Cameron Pass	2/28	60	22.5	25.5	18.8
Columbine Lodge	2/27	51	16.1	23.1	19.6
Northgate	2/28	27	6.6	3.3	5.3
Park View	2/26	31	7.7	7.8	7.2
Willow Cr. Pass (B)	2/26	35	8.8	10.7	9.8
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/26	24	5.9	6.1	5.8
Boulder Falls	2/27	32	8.7	12.4	9.1
University Camp	2/27	40	11.5	15.7	15.6
Big Thompson River					
Deer Ridge	2/27	15	5.7	3.7	3.9
Hidden Valley	2/27	31	9.0	7.7	7.9
Lake Irene (B)	2/25	54	14.9	19.2	18.2
Long's Peak	2/23	29	6.2	10.3	8.0
Two Mile	2/27	36	10.2	14.9	10.9
Cache La Poudre					
Bennett Creek	2/24	26	6.7	6.2	---
Big South	2/26	8	2.4	0.4	2.4
Cameron Pass	2/28	60	22.5	25.5	18.8
Chambers Lake	2/26	26	8.0	7.2	7.2
Deadman Hill	2/27	37	10.9	13.4	12.6
Hour Glass Lake	2/24	24	6.4	5.9	5.1
Joe Wright	2/28	55	18.2	18.9	---
Lost Lake	2/26	32	8.7	11.1	9.6
Pine Creek	2/27	12	2.9	1.1	1.6
Red Feather	2/27	21	6.2	5.2	5.6
Clear Creek					
Baltimore (B)	2/26	24	5.9	6.1	5.8
Berthoud Falls	2/26	36	9.6	11.8	11.5
Empire	2/26	17	4.3	5.1	6.0
Grizzly Peak (B)	2/26	37	9.5	15.5	13.4
Loveland Lift	2/27	45	12.8	9.2	17.7
Loveland Pass	2/27	39	10.1	12.9	12.3
Saint Vrain River					
Copeland Lake	2/27	14	4.1	5.1	3.7
Ward	2/27	21	4.9	4.4	4.8
Wild Basin	2/27	25	6.4	11.2	9.7
South Platte River					
Como	2/27	25	7.1	8.3	---
Geneva Park	2/28	18	3.9	3.5	3.1
Horseshoe Mt.	2/26	29	6.6	11.9	---
Hoosier Pass	2/28	32	8.5	11.3	10.5
Jefferson Creek	2/27	27	7.1	8.2	7.4
Mosquito	2/27	25	6.7	11.3	---
Trout Creek Pass	2/26	21	4.6	6.2	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/23	27	4.9	2.3	4.8
Cooper Hill (B)	2/26	32	7.4	8.7	8.5
East Fork	2/28	26	5.9	8.2	7.6
Four Mile Park	2/26	19	4.3	5.7	4.6
Fremont Pass	2/28	38	10.2	12.6	12.4
Garfield	2/27	39	12.5	11.0	11.4
Hermit Lake	2/26	30	8.6	6.6	---
Monarch Pass	2/27	45	14.4	14.3	14.3
Tennessee Pass	2/27	29	7.7	9.8	8.5
Twin Lakes Tunnel	2/27	22	6.0	10.8	8.6
Westcliffe	2/26	29	6.4	5.8	5.7

NOTE: NS - No Survey
(B) - On adjacent drainage

Snow Course	Current Information: Date of Survey	Current Information: Snow Depth (Inches)	Current Information: Water Content (Inches)	Past Record: Water Content (Inches): Last Year	Past Record: Water Content (Inches): Avg 53 67
Cucharas River					
Blue Lakes	2/26	11	3.6	0.0	3.5
Cucharas Pass	2/26	29	8.0	4.4	---
LaVeta Pass (B)	2/26	34	7.3	8.4	7.8
Purgatorie River					
Bourbon	2/26	30	6.8	5.0	6.4
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/23	37	9.8	2.2	5.5
Summitville	2/26	62	21.2	16.1	14.6
Conejos River					
Cumbres	3/2	53	19.0	12.8	16.5
LaManga	3/2	60	19.6	12.3	---
Platoro	2/27	54	17.8	12.8	13.8
River Springs	2/27	27	7.6	2.0	5.8
Culebra River					
Brown Cabin	2/27	28	6.9	4.1	---
Cottonwood (B)	2/27	29	6.9	---	---
Culebra	2/26	37	9.3	9.0	7.3
LaVeta Pass (B)	2/26	34	7.3	8.4	7.8
Trinchera (B)	3/2	32	8.6	7.8	---
Rio Grande					
Cochetopa Pass	2/26	26	5.8	5.4	4.5
Grayback	2/26	54	17.4	---	---
Hiway	2/27	70	26.2	19.8	21.4
Lake Humphrey	2/22	33	7.6	7.4	6.2
Love Lake	2/27	41	11.6	10.2	---
Pass Creek	2/27	47	16.0	10.5	10.8
Pool Table	2/27	27	5.7	6.4	5.9
Porcupine	2/28	36	8.2	11.6	8.7
Santa Maria	2/27	25	5.0	4.2	4.4
Upper Rio Grande	2/28	37	10.2	10.5	6.6
Wolf Creek Pass	2/29	74	27.5	21.2	22.9
Wolf Cr. Sum. (B)	2/29	85	31.7	26.1	22.1
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	2/26	24	5.8	1.4	3.2
Rio Chama					
Bateman	2/26	40	11.0	6.8	9.4
Capulin	3/1	21	4.7	2.2	3.9
Chama Divide	2/26	21	5.1	0.5	3.6
Chamita	2/27	33	8.7	4.3	7.9
Rio Grande					
Aspen Grove	2/21	29	7.7	4.5	5.2
Big Tesuque	2/20	32	9.6	4.2	4.6
Blue Bird Mesa	2/28	14	4.1	1.5	4.7
Cordova	2/28	38	8.3	6.2	9.7
Elk Cabin	2/23	27	6.4	---	3.3
Hopewell	2/27	47	15.0	11.1	---
La Cueva	2/26	26	7.3	4.8	3.9
Pajarito Peak	3/1	12	2.3	0.0	1.5
Payrole	2/26	34	9.5	5.4	7.8
Quemazon	2/22	39	9.7	6.8	7.7
Rio En Medio	2/20	43	13.2	6.3	7.9
Sandoval	2/23	26	6.2	5.1	5.0
Taos Canyon	2/23	23	6.4	1.6	4.4
Teakettle	2/28	35	9.3	---	---
Tres Ritos	3/1	28	7.7	1.9	4.8
Rio Hondo					
Twinning	2/23	32	8.7	4.7	---
Red River					
Hematite Park (B)	2/22	22	6.0	2.6	3.7
Red River	2/22	24	6.3	5.7	5.2

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1973

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/27	42	14.1	8.5	10.2
Lemon	2/26	37	11.2	6.5	---
Mineral Creek	2/27	49	16.2	11.7	11.7
Molas Lake	2/27	44	13.8	10.4	11.0
Purgatory	2/27	67	22.9	19.1	---
Red Mt. Pass (B)	2/27	80	29.9	25.8	23.5
Silverton Sub-Sta	2/27	35	10.6	6.7	5.6
Spud Mountain	2/27	68	24.1	20.1	19.5
Dolores River					
Lizzard Head	2/27	51	16.5	13.3	12.6
Lone Cone	2/27	46	15.1	13.0	---
Rico	2/27	34	10.5	5.8	6.8
Telluride	2/28	31	9.3	6.4	5.9
Trout Lake	2/28	45	14.0	9.5	10.7
San Juan River					
Chama Divide (B)	2/26	21	5.1	0.5	3.6
Chamita (B)	2/27	33	8.7	4.3	7.9
Upper San Juan	2/27	84	32.3	23.5	25.2
Wolf Cr. Pass (B)	2/29	74	27.5	21.2	22.9
Wolf Cr. Summit	2/29	85	31.7	26.1	22.1
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/27	61	19.4	19.6	17.0
Blue Mesa	2/28	32	7.3	7.0	3.5
Butte	2/28	38	10.5	10.6	---
Cochetopa Pass (B)	2/26	26	5.8	5.4	4.5
Crested Butte	2/27	43	11.1	9.8	10.6
Keystone	2/27	56	18.3	15.4	16.3
Lake City	2/23	30	7.1	6.8	7.6
Mesa Lakes (B)	2/27	50	16.2	13.1	13.4
McClure Pass	2/26	50	16.7	14.7	14.6
Park Cone	2/26	31	7.3	8.9	8.8
Park Reservoir	2/27	66	22.0	18.1	19.6
Porphyry Creek	2/27	49	15.6	11.0	13.9
Tomichi	2/27	38	11.5	10.4	10.2
Surface Creek					
Alexander Lake	2/27	61	19.4	19.6	17.0
Mesa Lakes (B)	2/27	50	16.2	13.1	13.4
Park Reservoir	2/27	66	22.0	18.1	19.6
Uncompahgre River					
Ironton Park	2/28	41	12.2	7.6	10.4
Red Mountain Pass	2/27	80	29.9	25.8	23.5
Telluride (B)	2/28	31	9.3	6.4	5.9
COLORADO BASIN					
Blue River					
Blue River	2/28	29	7.2	7.1	7.3
Fremont Pass	2/28	38	10.2	12.6	12.4
Frisco	2/26	23	4.9	6.3	6.3
Grizzly Peak	2/26	37	9.5	15.5	13.4
Hoosier Pass (B)	2/28	32	8.5	11.3	10.5
Shrine Pass	2/26	46	12.9	16.0	13.6
Snake River	2/26	43	4.8	6.4	6.7
Summit Ranch	2/27	23	5.0	7.6	6.0
Colorado River					
Arrow	2/27	34	10.7	12.0	9.
Berthoud Pass	2/27	43	12.0	14.0	11.
Berthoud Summit	2/26	48	13.1	14.1	14.
Cooper Hill	2/26	32	7.4	8.7	8.
Fiddler Gulch	NS			---	---
Glenmar Ranch	2/26	30	7.2	8.4	6.
Gore Pass	2/27	29	7.8	9.6	8.
Grand Lake	2/25	30	6.0	8.1	6.
Lake Irene	2/25	54	14.9	19.2	18.
Lapland	2/26	27	7.4	10.3	8.
Lulu	2/27	47	13.8	16.9	13.
Lynx Pass	2/27	36	10.1	11.0	10.
McKenzie Gulch	2/26	26	5.5	7.2	4.
Middle Fork	2/26	31	7.8	7.5	7.
Milner	2/25	37	9.5	11.7	11.
North Inlet	2/25	32	8.0	7.9	7.
Pando	2/28	27	7.1	9.2	7.
Phantom Valley	2/25	32	8.0	7.7	8.
Ranch Creek	2/27	30	7.9	8.1	7.
Tennessee Pass (B)	2/27	29	7.7	9.8	8
Vail Pass	2/26	42	12.0	15.5	14
Vasquez	2/27	35	8.5	11.6	9
Roaring Fork River					
Aspen	2/26	42	12.2	15.4	13
Chapman	2/26	40	10.0	14.6	-
Independence Pass	2/27	40	11.2	12.7	13
Ivanhoe	2/27	48	14.6	15.3	13
Kiln	2/27	37	9.3	11.9	-
Last Chance	2/27	32	8.9	10.4	-
Lift	2/26	42	10.8	13.9	13
McClure Pass	2/26	50	16.7	14.7	14
Nast	2/27	25	6.1	5.5	5
North Lost Trail	2/26	45	14.0	15.0	13
Williams Fork River					
Glenmar Ranch	2/26	30	7.2	8.4	6
Jones Pass	2/27	42	12.4	11.7	10
Middle Fork	2/26	31	7.8	7.5	7
Willow Creek					
Granby	2/26	22	4.5	8.0	6
Willow Creek Pass	2/26	35	8.8	10.7	9
Plateau Creek					
Mesa Lakes	2/27	50	16.2	13.1	1
Park Reservoir	2/27	66	22.0	18.1	1
Trickle Divide	2/27	69	22.8	20.1	2
YAMPA BASIN					
Elk River					
Clark	2/28	37	9.0	8.6	1
Elk River	2/28	45	12.8	16.0	1
Hahn's Peak	2/28	40	9.3	11.3	
Yampa River					
Bear River	NS			---	
Buffalo Pass	2/26	96	29.8	40.6	
Columbine Lodge (B)	2/27	51	16.1	23.1	1
Dry Lake	2/26	51	16.3	16.5	1
Lynx Pass (B)	2/27	36	10.1	11.0	1
Rabbit Ears	2/27	59	19.5	22.3	2
Yampa View	2/27	39	12.1	12.7	
White River					
Burro Mountain	2/27	48	15.1	13.0	
Rio Blanco	2/26	42	11.3	12.0	

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/8/72	11.1	7.7	6.8	6.4
Willow Pass	10/25/72	9.5	7.5	8.3	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/1/72	6.9	3.1	3.5	3.7
Big Thompson River					
Beaver Dam	10/1/72	7.1	4.5	5.3	3.8
Guard Station	10/1/72	6.9	3.2	3.2	3.4
Two Mile	10/1/72	9.1	5.3	5.5	5.5
Clear Creek					
Clear Creek	12/28/72	9.5	7.1	5.3	7.1
Hoop Creek	10/25/72	4.9	2.8	2.6	2.9
Cache La Poudre River					
Feather	10/1/72	10.1	4.5	4.7	4.5
Laramie Road	10/1/72	12.4	6.9	6.5	7.8
South Platte River					
Hoosier Pass	10/25/72	7.8	5.5	4.4	4.9
Kenosha Pass	10/25/72	4.4	3.3	2.6	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/18/72	6.7	5.0	4.2	3.9
Leadville	10/16/72	7.8	4.0	3.4	4.2
Twin Lakes Tunnel	10/16/72	4.5	2.4	0.9	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/9/72	10.7	4.6	5.0	5.5
Rio Grande					
Bristol View	11/10/72	6.1	4.1	3.1	3.9
LaVeta	11/9/72	11.9	6.9	7.1	7.2
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	---	6.7	---	4.2	3.2
Chamita	2/27/73	8.0	7.0	4.1	4.1
Rio Grande					
Aqua Piedra	2/26/73	7.2	5.2	4.2	3.7
Big Tesuque	2/28/73	3.7	3.5	---	1.9
Rio En Medio	2/27/73	3.5	2.8	---	1.2
Taos Canyon	2/23/73	3.3	2.2	2.5	2.3
Red River					
Red River Summit	2/22/72	4.8	1.5	2.4	1.9

ALL PROFILE 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	11/8/72	9.1	7.2	5.5	6.3
Mineral Creek	11/8/72	5.7	3.2	3.1	3.7
Molas Lake	11/8/72	9.4	5.8	5.5	4.6
Dolores River					
Dolores	11/1/72	19.6	11.4	10.6	6.7
Lizzard Head	11/1/72	11.8	4.1	3.9	8.3
Rico	11/1/72	13.8	9.3	8.5	9.9
GUNNISON BASIN					
Gunnison River					
King	10/18/72	3.3	2.2	2.1	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	10/25/72	4.2	3.2	2.7	2.8
Colorado River					
Berthoud Pass	10/25/72	3.9	3.2	2.5	2.8
Gore	10/31/72	4.9	3.1	3.3	2.5
Grand Mesa	11/2/72	12.5	12.3	9.9	9.3
Ranch Creek	10/25/72	8.7	5.4	4.7	6.0
Vail	12/28/72	12.3	6.9	4.9	6.9
Roaring Fork					
Placita	11/8/72	9.3	7.8	5.8	5.2
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/8/72	19.0	12.1	11.3	11.8

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
APR. 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

COVER PHOTO NUMBER DSC-986-4

USDA SCS-PORTLAND OREG 1973

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

April 1, 1973

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
April 1, 1973

CURRENT SNOWPACK SHOULD PROVIDE ADEQUATE WATER SUPPLIES IN BOTH STATES. THE LOWEST SNOW AREA IS IN THE SOUTH PLATTE DRAINAGE, BUT HERE RESERVOIR CARRY-OVER IS GOOD AND SHOULD PROVIDE NEARLY ADEQUATE SUPPLIES. THE RIO GRAND AND SAN JUAN BASINS IN COLORADO AND NEW MEXICO HAVE EXTREMELY HIGH SNOWPACKS. SOME HIGH WATER CAN BE EXPECTED IN THESE AREAS. SOIL MOISTURE IN BOTH STATES IS EXCELLENT, DUE TO THE LATE MARCH SNOW STORM.

COLORADO

THE SNOWPACK IN COLORADO IS IN THREE DISTINCT BELTS. THE SOUTH AND NORTH PLATTE HAVE ONLY 85 TO 95 PERCENT OF NORMAL SNOWPACK. THE CENTER BELT INCLUDES THE ARKANSAS AND GUNNISON DRAINAGES WHICH ARE IN SLIGHTLY BETTER CONDITION. HERE THE SNOWPACK IS ABOUT 115 PERCENT. THE RIO GRANDE AND SAN JUAN BASINS HAVE VERY HIGH SNOWPACKS APPROACHING 150 PERCENT OF THE 15 YEAR AVERAGE. STREAMFLOW FORECASTS GENERALLY FOLLOW THE SNOWPACK PERCENTAGES. THERE SHOULD BE VERY FEW WATER SHORTAGES THIS SUMMER. THE RIO GRANDE AND SAN JUAN CAN EXPECT SOME HIGH WATER.

NEW MEXICO

THE RIO GRANDE HAS ONE OF THE HIGHEST SNOWPACKS ON RECORD. THE LATE MARCH - EARLY APRIL STORM ADDED CONSIDERABLE SNOW TO AN ALREADY BIG SNOWPACK. SOME SNOW COURSES INDICATE MORE SNOW THAN ANY TIME SINCE SNOW SURVEYS WERE STARTED IN 1937. THE SAN JUAN BASIN ALSO HAS A VERY HEAVY SNOWPACK. THE PECOS MAY FLOW AS MUCH AS ANY TIME SINCE 1958. SOIL MOISTURE IS REPORTED AS GOOD. RESERVOIR CARRY-OVER STORAGE IS EXCELLENT.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

SNOWFALL DROPPED OFF SLIGHTLY DURING MARCH. THE MAXIMUM PACK ON THE SOUTH PLATTE DRAINAGE IS ON THE CACHE LA POUDRE RIVER WHICH HAS SLIGHTLY BETTER THAN NORMAL SNOW. THE SAINT VRAIN HAS THE POOREST SNOWPACK WITH ONLY 73 PERCENT OF THE 15 YEAR AVERAGE. SOME LATE SEASON SHORTAGES COULD EXIST, HOWEVER, RESERVOIR STORAGE IS GOOD AND WILL BE AN EXCELLENT SUPPLEMENT. VALLEY SOILS ARE IN GOOD CONDITION DUE TO AN ABNORMAL AMOUNT OF LOW ELEVATION SNOWS.

This report prepared by
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DENVER, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (1)	82	82	100
Boulder at Orodell	40	82	49
Cache La Poudre at Canyon Mouth (2)	200	93	215
Clear Creek at Golden (3)	95	80	119
St. Vrain at Lyons (4)	55	79	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc	Avg
Coal Creek	Exc	Avg
North Fork of South Platte	Exc	Avg
North Fork of Cache La Poudre	Exc	Avg
Ralston Creek	Exc	Avg
Rock Creek	Exc	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	83	81
Boulder	3	81	80
Cache La Poudre	8	115	106
Clear Creek	6	89	77
Saint Vrain	3	80	73
South Platte	3	75	86

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	2	74	96
Boulder	1	86	91
Cache La Poudre	2	86	106
Clear Creek	2	90	102
Saint Vrain	2	77	93
South Platte	2	80	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	25.9	28.0	21.1
Black Hollow	8.0	4.4	4.7	3.3
Boyd Lake	44.0	37.5	36.4	27.6
Cache La Poudre	9.5	8.1	8.0	7.5
Carter Lake	108.9	100.2	107.5	81.7
Chambers Lake	8.8	4.7	1.9	3.0
Cheesman	79.0	39.4	79.0	49.0
Cobb Lake	34.3	20.9	20.3	9.9
Eleven Mile	97.8	91.8	78.0	72.1
Fossil Creek	11.6	9.5	8.8	7.0
Gross	43.1	20.7	25.2	22.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	6.4	6.4	4.7
Horsetooth	143.5	105.7	122.9	106.8
Lake Loveland	14.3	9.1	12.2	8.4
Lone Tree	9.2	9.0	7.8	6.6
Mariano	5.4	5.6	5.2	4.2
Marshall	10.3	4.0	6.0	3.0
Marston	18.0	15.6	15.5	14.7
Milton	24.4	16.7	17.8	10.8
Standley	42.0	24.7	30.3	11.0
Terry Lake	8.2	6.3	5.8	5.0
Union	12.7	10.9	12.1	7.6
Windsor	18.6	14.0	13.7	9.9

† 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOWPACK INCREASED CONSIDERABLY THIS MONTH SO STREAMFLOW FORECASTS REFLECT THIS INCREASE AND ARE NOW ABOUT THE 1953-67 AVERAGE. THE STORM AT THE END OF THE MONTH CONTINUED INTO APRIL SO SOME OF THE SNOW WATER IS NOT INCLUDED IN THE MEASUREMENTS. RESERVOIR STORAGE IS 90 PERCENT OF AVERAGE ON ALL RESERVOIRS EXCEPT JOHN MARTIN AND TURQUOISE, WHICH HAVE 20,400 ACRE FEET AND 26,300 ACRE FEET RESPECTIVELY, SLIGHTLY LESS THAN LAST YEAR. WATER SUPPLIES SHOULD BE ADEQUATE AS AVERAGE PRECIPITATION CONTINUES DURING THE SEASON.

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LA JUNTA, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	350	117	298
Arkansas at Salida (1)	350	113	309
Cucharas nr LaVeta	20	167	12
Purgatoire at Trinidad	50	109	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc	Avg
Fountain Creek	Exc	Avg
Grape	Exc	Avg
Hardscrable Creek	Exc	Avg
Huerfano	Exc	Avg
Monument Creek	Exc	Avg

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	106	100
Cucharas	2	606	190
Purgatoire	1	273	131

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	126	114
Cucharas and Purgatoire	1	113	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	0.0	13.3	11.1
Clear Creek	11.4	6.2	5.7	7.3
Cucharas	40.0	0.0	---	3.3
Great Plains	150.0	34.2	44.0	38.3
Horse Creek	26.9	0.0	0.0	4.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	20.4	25.4	89.4
Meredith	41.9	22.1	7.8	10.0
Model	15.0	---	---	3.1
Turquoise	130.0	49.7	59.0	---
Twin Lakes	57.9	26.3	31.4	19.9

+ 1953-1967 period.

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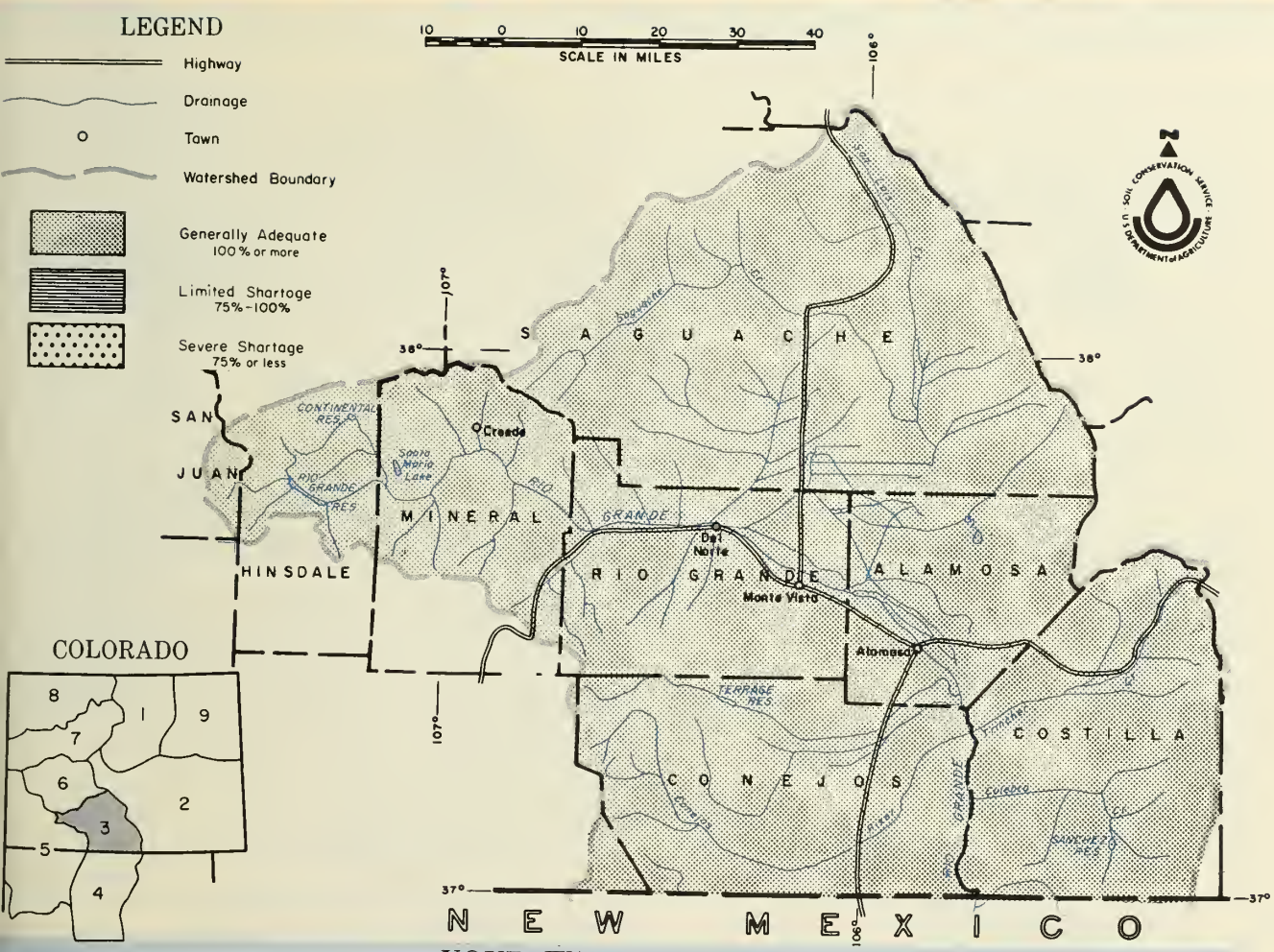
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE RIO GRANDE DRAINAGE CONTINUES TO BUILD AT A RAPID RATE. MOST OF THE SNOW COURSES IN THIS AREA ARE INDICATING 150 PERCENT OR HIGHER SNOWFALL. FORECASTS WERE RAISED CORRESPONDINGLY. MOST OF THE FORECASTS ARE NOW ABOVE 150 PERCENT OF THE 15 YEAR AVERAGE. HIGH WATER CAN BE EXPECTED IN MOST AREAS. IF THE SNOWPACK CONTINUES TO INCREASE, EARLY STREAMFLOW COULD BE EXTREMELY HIGH. SOILS IN THE IRRIGATED AREAS ARE WET.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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DENVER, COLORADO

Issued by
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DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	90	145	62
Conejos nr Mogote (1)	252	138	182
Culebra at San Luis (2)	35	184	19
Rio Gr. at 30 Mile Bridge (3)	170	145	117
Rio Gr. nr Del Norte(3)	650	148	438
South Fork at South Fork	165	150	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc	Avg
Sangre de Cristo Cr.	Exc	Avg
Trinchera	Exc	Avg

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	212	161
Conejos	3	342	146
Culebra	2	294	182
Rio Grande	10	191	143

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	1	86	132
Conejos	1	89	80
Culebra	1	113	99
Rio Grande	2	102	109

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	5.6	6.2	5.1
Platoro	60.0	2.9	2.9	7.1
Rio Grande	45.8	20.3	18.1	13.3

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	5.8	10.0	11.1
Santa Maria	45.0	5.1	6.6	6.0
Terrace	17.7	6.5	6.3	4.0

+ 1953-1967 period.

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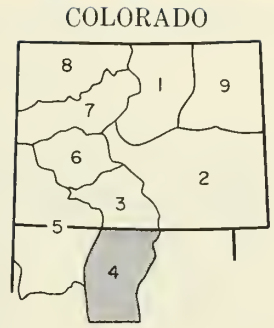
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

A FEW SNOW COURSES ARE INDICATING A MAXIMUM OF RECORD. ON THE RIO GRANDE DRAINAGE IN NEW MEXICO CONSIDERABLY HIGH WATER CAN BE EXPECTED. FORECASTS ARE GENERALLY IN THE 150 PERCENT TO 175 PERCENT RANGE, HOWEVER, SEVERAL INCLUDING THE PECOS ARE AS HIGH AS 200 PERCENT OF THE 1953-67 AVERAGE. IF THE SNOWPACK CONTINUES TO INCREASE, SOME FLOODING WILL OCCUR. SOIL MOISTURE IS GOOD. THE FIRST OF APRIL STORM LEFT CONSIDERABLE SNOW AT THE LOW ELEVATIONS.

This report prepared by
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SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	32	178	18
Pecos at Pecos	87	212	41
Rio Chama at El Vado	290	154	188
Rio Gr. at Otowi (2)	850	166	513
Rio Gr. at San Mar (2)	660	198	334
Rio Hondo nr Valdez	25	167	15
Red R. at Mouth nr Questa	50	156	32

The forecast of the Rio Grande at San Marcial is 102 *% of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.*

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc	Avg
Jemez River	Exc	Avg
Mora River	Exc	Avg
Nambe Creek	Exc	Avg
Rio Ojo Caliante	Exc	Avg
Rio Pueblo de Taos	Exc	Avg
Santa Fe Creek	Exc	Avg

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHEO	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	---	530
Rio Chama	4	563	186
Rio Grande, N.M.	11	1010	247
Rio Hondo	1	260	---
Red River	2	628	174

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	-	--	---
Rio Chama	1	96	109
Rio Grande	-	--	---
Red River	-	--	---

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	90	45	64
Caballo	344	84	35	65
Conchas	273	145	78	161
Elephant Butte	2195	373	204	334

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	38	2	6
McMillen-Avalon	32	30	9	22

+ 1953-1967 period.

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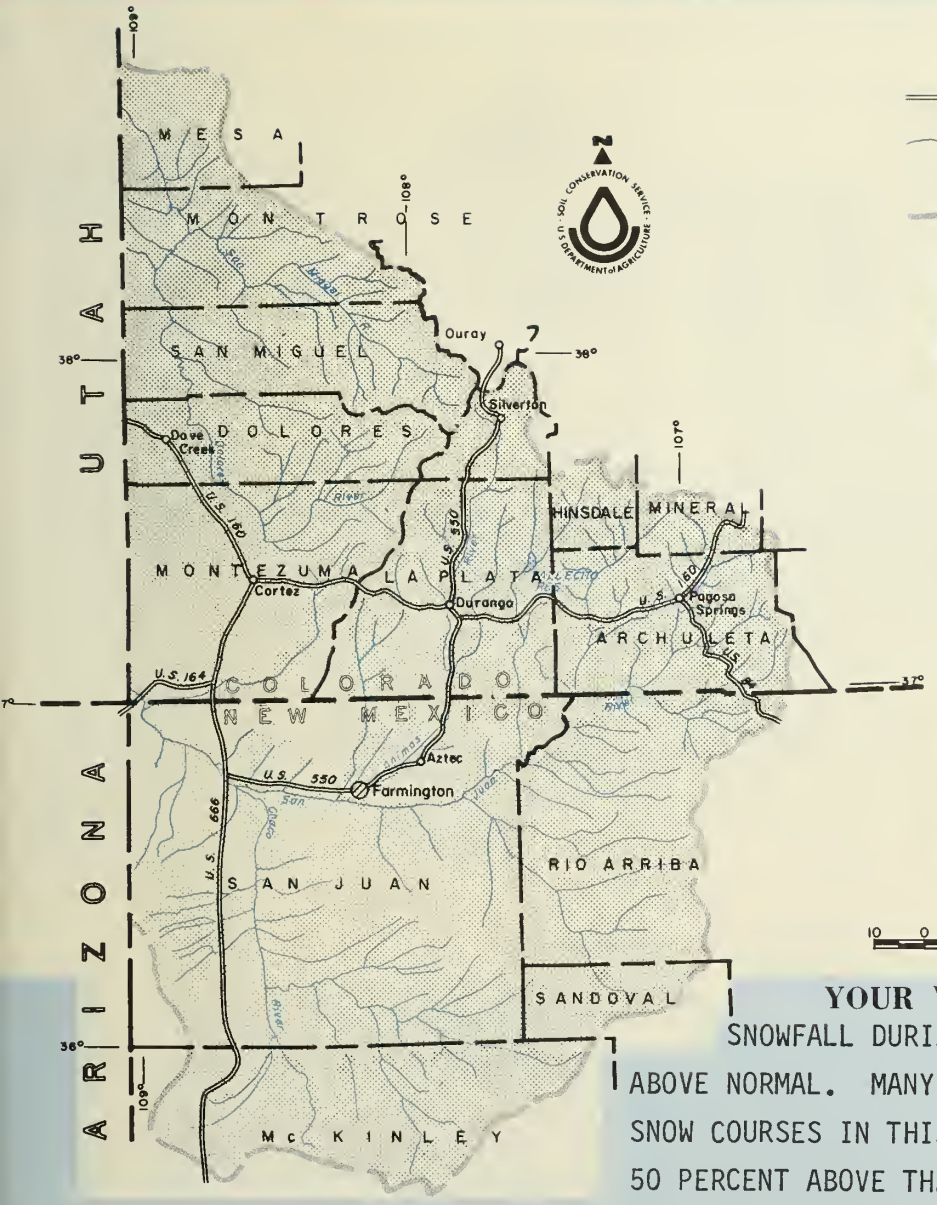
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
April 1, 1973

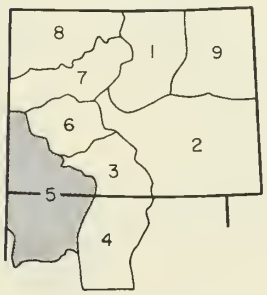
U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

SNOWFALL DURING MARCH WAS MUCH ABOVE NORMAL. MANY OF THE LOW ELEVATION SNOW COURSES IN THIS AREA ARE MORE THAN 50 PERCENT ABOVE THE 15 YEAR NORMAL. SNOW ON THE DOLORES WATERSHED AS A WHOLE IS 163 PERCENT OF THE 15 YEAR AVERAGE. STREAMFLOW FORECASTS HAVE BEEN INCREASED IN SOME CASES AS MUCH AS 30 PERCENT. MOST OF THE LOW AREAS CAN EXPECT HIGH WATER AS THE SNOWMELT STARTS. THERE WILL BE NO WATER SHORTAGE. SOILS IN THE VALLEYS ARE WET.

This report prepared by
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SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	570	142	409
Dolores at Dolores	335	145	231
La Plata at Hesperus	37	154	24
Los Pinos at Bayfield (1)	290	150	194
Piedra Cr. at Piedra	245	150	163
San Juan at Carracas	575	152	379
Inflow to Navajo Res. (1) (Apr-Jul)	950	153	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc	Exc
Mancos	Exc	Exc
San Miguel	Exc	Exc

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	202	141
Dolores	4	302	163
San Juan	5	243	141

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	114	97
Dolores	2	72	73
San Juan	1	96	76

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	7	10	7
Lemon	40	21	22	15
Navajo	1696	960	838	--
Vallecito	126	73	60	50
Narraguinnep		17		
Jackson Gulch	10	5	5	4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE INCREASED ON THE UNCOMPAHGRE RIVER AND SURFACE CREEK TO ABOUT 125 PERCENT OF THE 1953-67 AVERAGE. OTHER GUNNISON RIVER FORECASTS ARE THE SAME AS LAST MONTH RANGING FROM 2 TO 19 PERCENT ABOVE AVERAGE. SOIL MOISTURE CONDITIONS IN THE MOUNTAIN AREAS ARE ABOVE AVERAGE. RESERVOIR STORAGE IN BLUE MESA AND MORROW POINT IS SIMILAR TO LAST YEAR WHILE TAYLOR RESERVOIR CONTAINS 41,000 ACRE FEET COMPARED TO 70,000 ACRE FEET LAST YEAR.

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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison Inflow to Blue Mesa (1)	785	102	767
Gunnison nr Grand Junction (2)	350	119	1137
N. Fork of Gunnison(3)	300	117	257
Surface Cr. nr Cedaridge	20	125	16
Uncompahgre at Colona	165	128	129

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc	Fair

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	134	112
Surface Creek	3	148	119
Uncompahgre	3	172	117

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	110	121
Surface Creek	1	124	121
Uncompahgre	1	124	121

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	830	308	321	--
Morrow Point	121	115	116	--
Taylor	106	41	70	58

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period.

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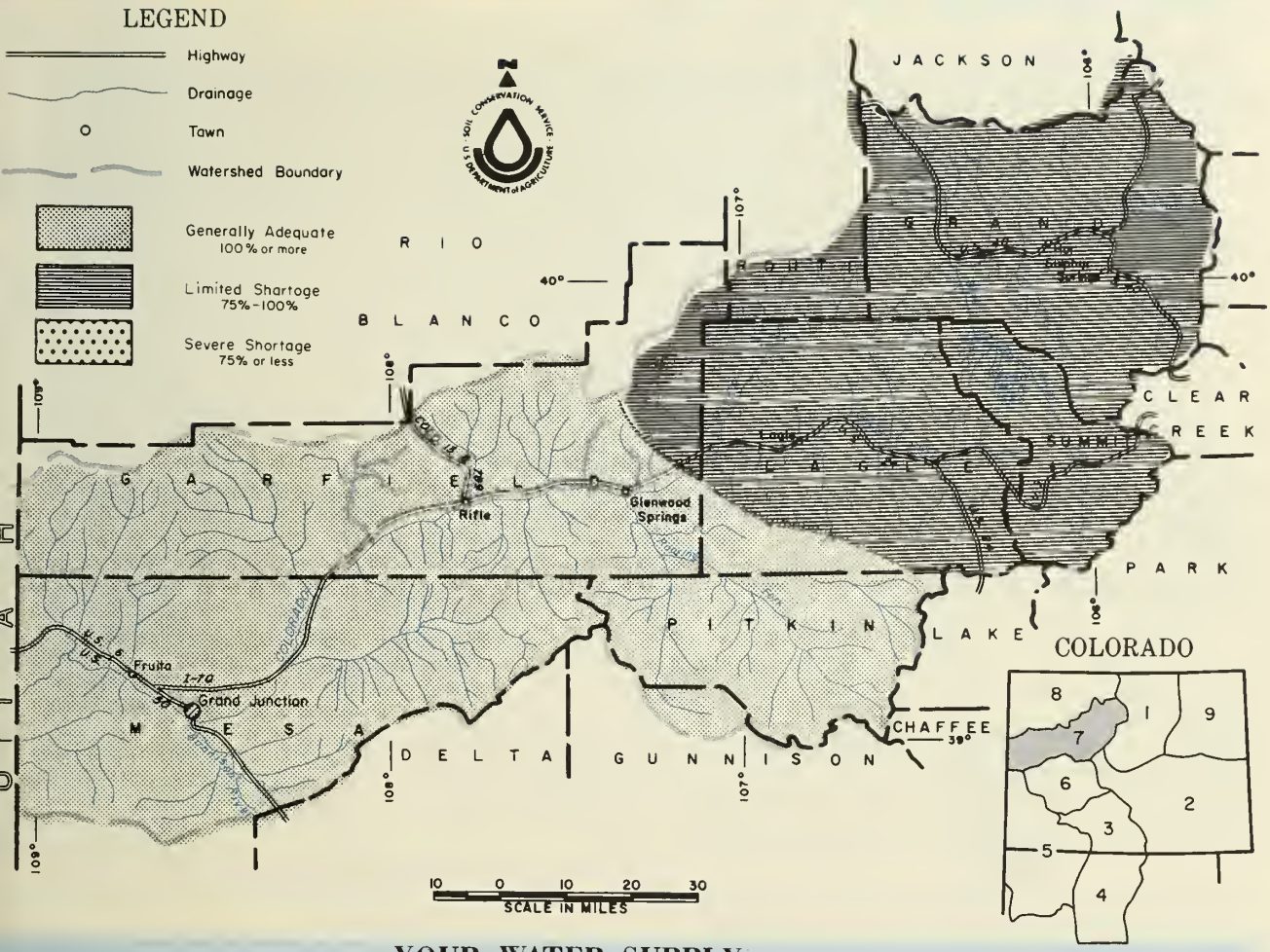
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE COLORADO DRAINAGE REMAINS NEAR THE NORMAL MARK. THE LOWEST SNOW IS ON THE BLUE RIVER WITH 80 PERCENT OF NORMAL AND 140 PERCENT ON THE GRAND MESA. OUTLOOK FOR SUMMER FLOWS GREATLY IMPROVED ON THE STREAMS FED BY THE GRAND MESA. OTHER FORECASTS REMAINED SIMILAR TO MARCH 1 AND NEAR THE 1953-67 AVERAGE. WATER SUPPLIES SHOULD BE GENERALLY ADEQUATE THIS SUMMER OVER THE COLORADO BASIN. SOIL MOISTURE CONDITIONS IN THE VALLEY ARE REPORTED AS GOOD.

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DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue inflow to Dillon	125	82	153
Blue ab Green Mt. (1)	195	82	236
Colo. Rv. inflow to Granby Res. (2)	200	91	219
Colo. Rv. nr Dotsero (3)	1400	102	1375
Roaring Fork at Glenwood Springs (4)	725	105	692
Wm. Fk nr Par. (5)	55	92	60
Willow Cr. inflow to Willow Cr. Res.	42	91	46
Colo. nr Cameo (6)	2250	99	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Avg	Fair
Eagle River	Avg	Fair
Gypsum Creek	Avg	Fair

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Gro as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Di and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus ch in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4)

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	80	81
Colorado	21	87	90
Plateau	3	140	116
Roaring Fork	7	121	104
Williams Fork	2	106	101
Willow	2	84	77

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	88	92
Colorado	5	108	110
Roaring Fork	1	133	117
Willow	1	94	108

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	219	236	233
Granby	466	319	316	233
Green Mountain	147	66	63	63
Homestake	43	17	10	---

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	55	62	--
Williams Fork	97	53	52	27
Willow Creek	9	8	8	6
Vega	32	--	16	11

+ 1953-1967 period

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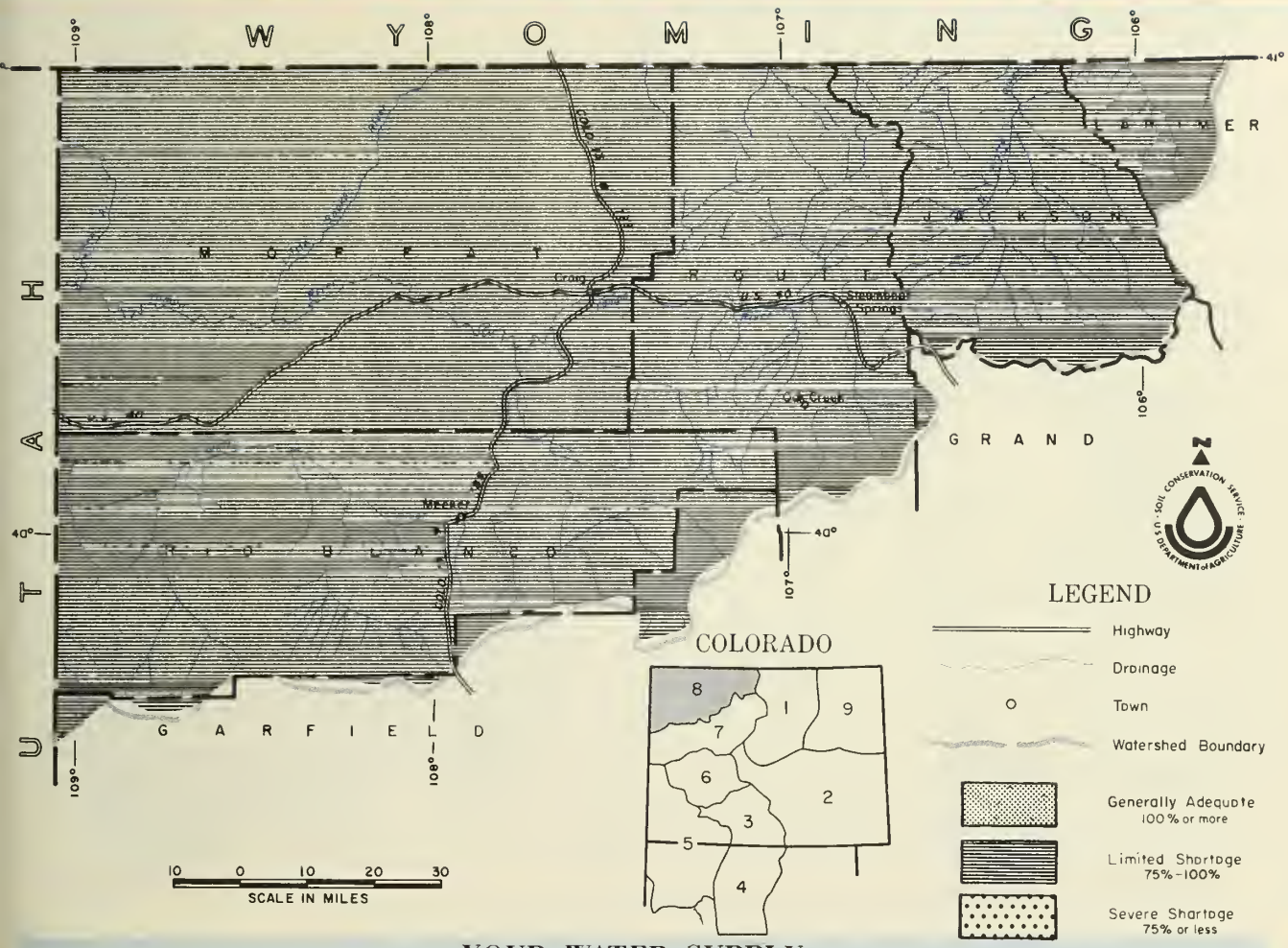
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL WAS AT JUST ABOUT A NORMAL RATE DURING MARCH OVER THE ENTIRE AREA. MOST OF THE BASINS INDICATE ABOUT 95 PERCENT OF THE 15 YEAR AVERAGE. SUMMER STREAMFLOW SHOULD BE NEAR NORMAL. IF THE REMAINDER OF THE SEASON SNOWFALL IS NEAR NORMAL, THERE SHOULD BE NO WATER SHORTAGES IN THE AREA. SOIL MOISTURE IS REPORTED AS GOOD.

This report prepared by

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DENVER, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	175	92	191
Laramie at Jelm	119	101	61
Little Snake at Lily	250	90	277
No. Platte at Northgate	208	97	215
White nr Meeker	278	95	293
Yampa nr Maybell	800	94	853
Yampa at Steamboat Springs	250	96	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Avg	Avg
Hunt Creek	Avg	Avg
Illinois River	Avg	Avg
Michigan River	Avg	Avg
Oak Creek	Avg	Avg
Trout Creek	Avg	Avg

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	3	97	92
Laramie	3	100	97
North Platte	5	100	94
White	2	120	96
Yampa	6	93	90

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	86	106
North Platte	2	91	114
Yampa	1	90	156

+ 1953-1967 period.

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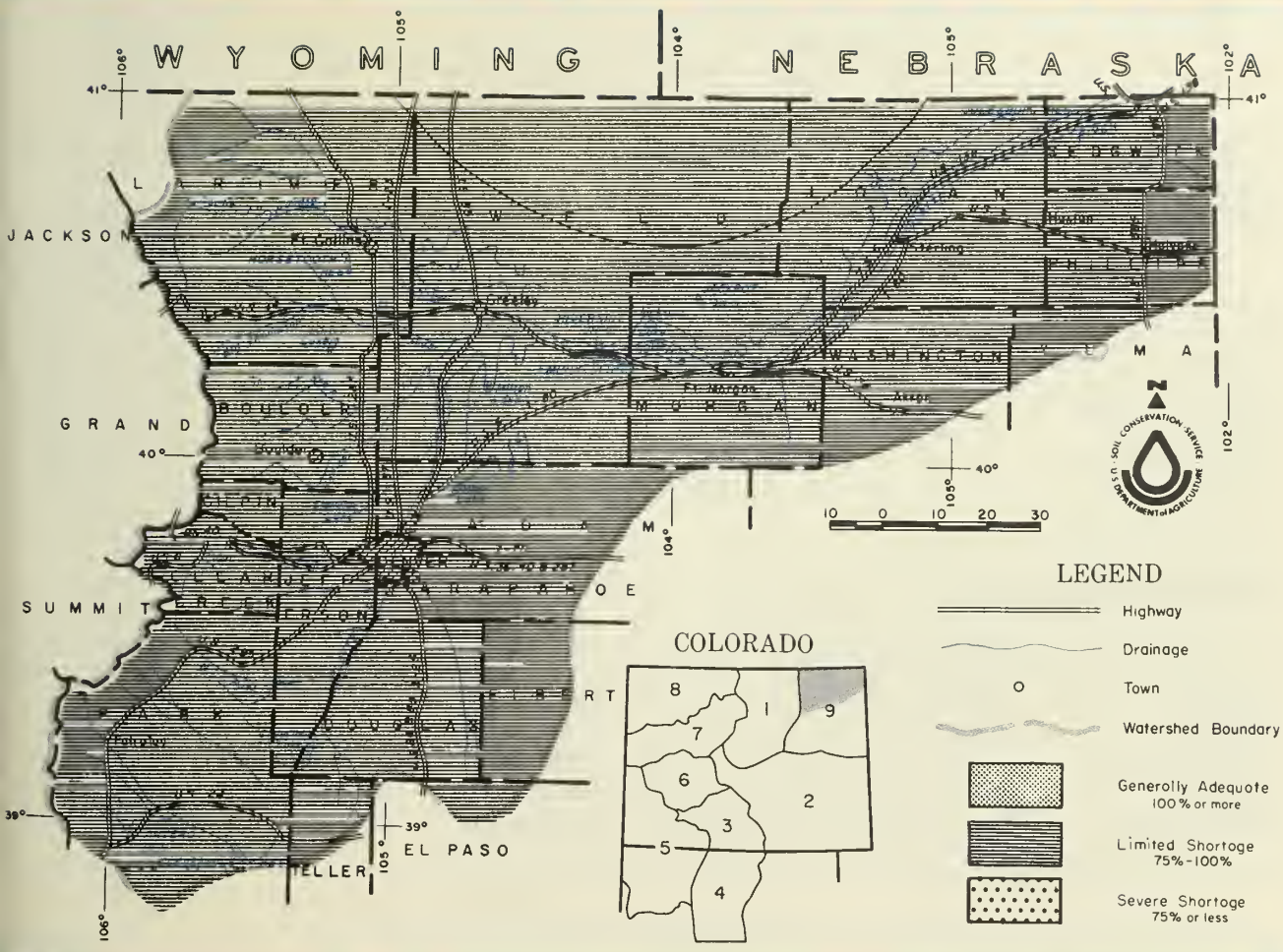
"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

April 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL WAS SLIGHTLY BELOW NORMAL DURING MARCH OVER ALL OF THE SOUTH PLATTE BASIN. SOME OF THE BASIN SNOWS WERE DOWN AS MUCH AS 15 PERCENT. WATER SUPPLY FORECASTS WERE GENERALLY LOWERED. SOME LATE SEASON SHORTAGES COULD EXIST. RESERVOIR CARRY-OVER STORAGE IS 112 PERCENT OF NORMAL ON THE LOWER SOUTH PLATTE AND WILL BE AN EXCELLENT SUPPLEMENT. SOIL MOISTURE CONDITIONS IN THE PLAINS IS EXCELLENT. MOUNTAIN SOILS CONTAIN AVERAGE MOISTURE.

This report prepared by
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Issued by
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DENVER, COLORADO
STERLING, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	82	82	100
Boulder at Orodell	40	82	49
Cache La Poudre at Canyon Mouth (2)	200	93	215
Clear Cr. at Golden(3)	95	80	119
Saint Vrain at Lyons (4)	55	79	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc	Avg
South Platte from Fort Morgan to Sterling	Exc	Avg
South Platte below Sterling	Exc	Avg

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minu diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	83	81
Boulder	3	81	80
Cache La Poudre	8	115	106
Clear Creek	6	89	77
Saint Vrain	3	80	73
South Platte	3	75	86

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	2	74	96
Boulder	1	86	91
Cache La Poudre	2	86	106
Clear Creek	2	90	102
Saint Vrain	2	77	93
South Platte	2	80	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	100.1	107.5	81.7
Cheesman	79.0	39.4	79.0	49.0
Eleven Mile	97.8	91.8	78.0	72.1
Empire	37.7	33.6	32.8	29.6
Horsetooth	143.5	105.4	122.9	106.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	33.7	34.2	34.0
Julesburg	28.2	23.1	22.7	21.5
Prewitt	32.8	27.9	27.5	16.8
Point of Rocks	70.0	70.6	69.5	58.4
Riverside	57.5	57.9	59.0	49.6

+ 1953-1967 period.

Return if not delivered
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF AGRICULTURE

U.S. MAIL

FIRST CLASS MAIL

"The Conservation of Water begins with the Snow Survey"

APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1973

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG. 53-67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/30	52	14.3	15.2	16.3
McIntyre	3/29	43	12.3	11.1	10.5
Roach	3/28	61	17.0	17.3	18.2
North Platte River					
Cameron Pass	3/29	79	27.8	28.4	26.5
Columbine Lodge	3/28	52	17.3	24.2	23.5
Northgate	3/29	32	8.5	2.5	6.2
Park View	3/27	34	8.8	7.2	8.6
Willow Cr. Pass (B)	3/27	38	10.5	10.5	12.5
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/29	27	7.4	5.2	5.9
Boulder Falls	3/22	38	10.0	14.3	13.3
University Camp	3/22	47	14.1	19.3	20.7
Big Thompson River					
Deer Ridge	3/31	19	5.0	1.3	5.0
Hidden Valley	3/31	35	8.4	9.0	11.0
Lake Irene (B)	3/27	58	17.8	20.2	20.7
Long's Peak	3/26	32	7.1	12.3	10.7
Two Mile	3/31	42	11.6	17.3	14.5
Cache La Poudre					
Bennett Creek	3/28	35	8.6	4.7	---
Big South	3/28	9	3.1	0.2	2.4
Cameron Pass	3/29	79	27.8	28.4	26.5
Chambers Lake	3/28	31	9.6	7.4	9.1
Deadman Hill	3/30	52	14.3	15.2	16.3
Hour Glass Lake	3/28	31	7.5	6.1	6.8
Joe Wright	3/29	75	23.6	22.4	---
Lost Lake	3/28	36	10.7	12.6	11.5
Pine Creek	3/30	19	4.3	0.3	1.9
Red Feather	3/30	28	9.1	4.9	7.2
Clear Creek					
Baltimore (B)	3/29	27	7.4	5.2	5.9
Berthoud Falls	3/29	42	11.7	13.7	12.9
Empire	3/29	22	5.6	6.3	7.5
Grizzly Peak (B)	3/29	45	12.2	18.4	17.9
Loveland Lift	3/30	53	15.0	11.6	23.4
Loveland Pass	3/30	43	12.0	16.2	15.4
Saint Vrain River					
Copeland Lake	3/31	18	4.2	3.2	4.4
Ward	3/28	26	5.4	4.6	6.7
Wild Basin	3/31	31	7.2	13.3	11.8
South Platte River					
Como	3/28	33	7.3	7.4	---
Geneva Park	4/2	24	4.0	4.8	3.5
Horseshoe Mt.	3/28	39	8.7	13.7	---
Hoosier Pass	3/30	44	10.5	14.3	12.9
Jefferson Creek	3/29	39	7.6	10.2	9.2
Mosquito	3/29	39	9.0	10.2	---
Trout Creek Pass	3/28	29	6.5	4.3	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/27	37	7.2	2.3	5.8
Cooper Hill (B)	3/30	42	9.6	11.9	10.6
East Fork	3/30	30	7.5	8.9	9.6
Four Mile Park	3/29	26	5.0	3.6	4.4
Fremont Pass	3/30	48	13.3	15.8	16.1
Garfield	3/28	56	15.8	12.6	13.2
Hermit Lake	3/26	40	9.8	2.4	---
Monarch Pass	3/28	59	17.9	16.0	17.3
Tennessee Pass	3/28	38	8.2	10.6	10.1
Twin Lakes Tunnel	3/29	39	9.9	12.6	10.7
Westcliffe	3/26	34	8.5	2.8	5.4

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES) LAST YEAR	PAST RECORD: WATER CONTENT (INCHES) AVG. 53-67
Cucharas River					
Blue Lakes	3/28	33	6.2	0.6	2.9
Cucharas Pass	3/28	52	10.0	1.2	---
LaVeta Pass (B)	3/28	56	13.2	2.6	7.3
Purgatorie River					
Bourbon	3/28	49	9.3	3.4	7.1
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	3/27	43	11.4	0.1	5.5
Summitville	3/28	87	26.6	17.8	18.1
Conejos River					
Cumbres	3/31	80	27.3	8.0	18.6
LaManga	3/31	83	24.2	11.9	---
Platoro	3/28	72	22.0	9.0	16.6
River Springs	3/29	34	9.2	0.0	4.8
Culebra River					
Brown Cabin	3/28	40	9.0	1.5	---
Cottonwood (B)	NS			---	---
Culebra	4/2	61	15.4	7.1	8.4
LaVeta Pass (B)	3/28	56	13.2	2.6	7.3
Trinchera (B)	3/31	62	13.5	7.6	---
Rio Grande					
Cochetopa Pass	3/29	33	7.6	6.3	5.1
Grayback	3/28	70	21.7	10.1	---
Hiway	3/28	96	33.0	18.6	26.0
Lake Humphrey	3/29	47	10.7	3.7	5.5
Love Lake	3/30	57	15.2	8.0	---
Pass Creek	3/28	56	17.8	4.4	11.1
Pool Table	3/29	43	8.7	5.4	5.9
Porcupine	3/30	51	12.0	11.0	10.1
Santa Maria	3/29	32	6.6	0.3	3.7
Upper Rio Grande	3/29	56	13.8	6.0	6.8
Wolf Creek Pass	3/28	100	35.1	16.5	27.0
Wolf Cr. Summit (B)	3/28	115	39.7	24.7	28.3
RIO GRANDE BASIN - NM					
Pecos River					
Panchuela	3/29	33	6.9	0.0	1.3
Rio Chama					
Bateman	3/30	66	17.8	6.7	11.4
Capulin Peak	3/26	36	9.0	0.0	4.0
Chama Divide	3/30	23	5.6	0.0	1.4
Chamita	3/31	44	12.7	1.3	7.5
Rio Grande					
Aspen Grove	3/28	37	10.3	1.1	3.7
Big Tesuque	3/28	44	12.7	0.0	4.2
Blue Bird Mesa	3/29	40	9.5	0.1	3.6
Cordova	3/30	75	17.4	6.4	10.0
Elk Cabin	3/26	29	7.8	0.0	2.1
Hopewell	3/30	76	22.1	7.8	---
LaCueva	3/28	42	10.7	---	---
Pajarito Peak	3/26	10	2.8	0.0	0.3
Payrole	3/28	48	12.2	1.5	6.2
Quemazon	4/3	76	20.7	5.2	8.2
Rio En Medio	3/28	57	16.7	1.5	7.7
Sandoval	3/30	59	14.6	0.0	4.5
Taos Canyon	3/29	37	8.4	1.1	3.5
Teakettle	3/27	46	13.0		
Tres Ritos	3/28	40	11.1	0.5	4.2
Rio Hondo					
Twinning	3/29	50	11.4	4.4	---
Red River					
Hematite Park (B)	3/28	27	7.1	0.6	3.5
Red River	3/28	31	8.6	1.9	5.5

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SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/29	64	19.1	3.6	10.8
Lemon	3/30	57	15.7	0.0	---
Mineral Creek	3/29	65	19.9	11.5	13.3
Molas Lake	3/29	57	16.3	4.5	12.6
Purgatory				16.7	---
Red Mt. Pass (B)	3/29	103	35.1	29.5	30.1
Silverton Sub-Sta.	3/29	44	13.0	0.0	5.1
Spud Mountain	3/29	100	30.8	17.4	23.1
Dolores River					
Lizzard Head	3/29	72	22.4	12.4	16.0
Lone Cone	3/30	61	18.9	10.7	---
Rico	3/29	46	13.1	0.0	5.4
Telluride	3/29	42	10.6	1.6	5.7
Trout Lake	3/29	67	19.5	7.7	13.2
San Juan River					
Chama Divide (B)	3/30	23	5.6	0.0	1.4
Chamita (B)	3/31	44	13.0	1.3	7.5
Upper San Juan	3/28	111	40.3	12.6	30.8
Wolf Cr. Pass (B)	3/28	100	35.1	16.5	27.0
Wolf Cr. Summit	3/28	115	39.7	24.7	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/29	78	26.5	18.7	21.4
Blue Mesa	3/29	33	7.6	3.2	7.9
Butte	3/30	48	13.4	13.4	---
Cochetopa Pass (B)	3/29	33	7.6	6.3	5.1
Crested Butte	3/30	49	14.1	11.2	13.3
Keystone	3/27	59	19.8	17.9	19.7
Lake City	3/28	37	7.9	7.2	7.7
Mesa Lakes (B)	3/29	65	20.4	11.6	17.5
McClure Pass	3/28	54	19.2	10.0	14.6
Park Cone	3/27	33	8.5	10.4	10.9
Park Reservoir	3/30	89	27.3	19.8	23.6
Porphyry Creek	3/28	62	18.7	14.4	16.9
Tomichi	3/28	48	14.6	12.7	12.2
Surface Creek					
Alexander Lake	3/29	78	26.5	18.7	21.4
Mesa Lakes (B)	3/29	65	20.4	11.6	17.5
Park Reservoir	3/30	89	27.3	19.8	23.6
Uncompahgre River					
Ironton Park	3/29	55	16.9	5.3	17.9
Red Mountain Pass	3/29	103	35.1	29.5	30.1
Telluride (B)	3/29	42	10.6	1.6	5.7
COLORADO BASIN					
Blue River					
Blue River	3/30	33	8.5	8.7	8.5
Fremont Pass	3/30	48	13.3	15.8	16.1
Frisco	3/29	25	6.3	6.8	7.5
Grizzly Peak	3/29	45	12.2	18.4	17.9
Hoosier Pass (B)	3/30	44	10.5	14.3	12.9
Shrine Pass	3/29	53	14.7	18.8	17.4
Snake River	3/29	20	5.2	5.4	7.6
Summit Ranch	3/28	25	6.1	8.4	7.1

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Colorado River					
Arrow	3/28	38	12.6	14.5	11.8
Berthoud Pass	3/28	49	14.4	19.3	14.5
Berthoud Summit	3/29	56	16.3	19.0	19.3
Cooper Hill	3/30	42	9.6	11.9	10.6
Fiddler Gulch	3/28	51	11.3	12.4	15.1
Glenmar Ranch	3/27	29	7.8	7.5	7.9
Gore Pass	3/28	32	9.3	10.3	10.0
Grand Lake	3/28	33	7.5	8.0	8.2
Lake Irene	3/27	58	17.8	20.2	20.7
Lapland	3/28	32	8.3	12.4	9.9
Lulu	3/30	55	16.4	19.5	17.0
Lynx Pass	3/28	41	12.1	11.8	12.0
McKenzie Gulch	3/28	27	6.2	4.8	---
Middle Fork	3/26	32	9.4	8.8	9.1
Milner	3/27	39	10.6	12.1	13.3
North Inlet	3/29	30	7.9	7.4	8.7
Pando	3/30	32	8.8	10.2	10.4
Phantom Valley	3/27	33	9.3	7.3	10.4
Ranch Creek	3/28	35	9.3	10.2	9.4
Tennessee Pass (B)	3/28	38	8.2	10.6	10.1
Vail Pass	3/29	47	14.0	17.3	17.1
Vasquez	3/29	40	10.6	15.1	12.4
Roaring Fork River					
Aspen	3/27	54	17.7	16.7	16.4
Chapman	3/28	49	13.4	17.2	---
Independence Pass	3/29	53	14.3	15.1	17.
Ivanhoe	3/29	57	18.0	18.9	17.
Kiln	3/29	44	10.5	14.5	--
Last Chance	3/29	38	10.4	13.5	--
Lift	3/27	55	17.0	14.4	19.
McClure Pass	3/28	54	19.2	10.0	14.
Nast	3/29	25	6.3	4.9	5.
North Lost Trail	3/28	46	16.2	9.7	14.
Williams Fork River					
Glenmar Ranch	3/27	29	7.8	7.5	7.
Jones Pass	3/28	49	14.4	15.3	--
Middle Fork	3/26	32	9.4	8.8	9.
Willow Creek					
Granby	3/27	21	4.8	7.8	7.
Willow Cr. Pass	3/27	38	10.5	10.5	12.
Plateau Creek					
Mesa Lakes	3/29	65	20.4	11.6	17.
Park Reservoir	3/30	89	27.3	19.8	23
Trickle Divide	3/30	94	29.0	23.5	25
YAMPA BASIN					
Elk River					
Clark	3/30	35	9.8	9.1	10
Elk River	3/30	47	14.7	16.3	16
Hahn's Peak	3/30	39	12.2	12.3	12
White River					
Burro Mountain	3/29	57	18.9	12.7	17
Rio Blanco	3/28	42	12.6	13.5	15
Yampa River					
Bear River	3/29	41	9.5	10.4	11
Buffalo Pass	3/27	100	36.3	----	-
Columbine (B)	3/28	52	17.3	24.2	23
Dry Lake	3/27	57	19.0	19.0	19
Lynx Pass (B)	3/28	41	12.1	11.8	12
Rabbit Ears	3/28	71	22.8	25.4	25
Yampa View	3/28	45	14.7	12.0	14
Crosho	3/29	46	12.6	---	-

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	3/28/73	11.1	7.9	8.9	6.5
Willow Pass	3/27/73	9.5	7.2	7.7	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	3/30/73	6.9	3.2	3.7	3.5
Big Thompson River					
Beaver Dam	3/30/73	7.1	3.3	4.7	3.5
Guard Station	3/30/73	6.9	3.4	4.4	3.5
Two Mile	3/30/73	4.9	4.8	NS	4.9
Clear Creek					
Clear Creek	3/29/73	9.5	5.2	6.5	5.4
Hoop Creek	3/29/73	4.9	3.1	2.7	2.7
Cache La Poudre River					
Feather	3/30/73	10.1	4.8	7.0	4.4
Laramie Road	3/28/73	12.4	7.1	6.8	6.8
South Platte River					
Hoosier Pass	3/30/73	7.8	4.4	4.8	4.4
Kenosha Pass	3/29/73	4.4	2.2	3.4	2.2
ARKANSAS BASIN					
Arkansas River					
Garfield	3/28/73	6.7	4.6	3.9	3.5
Leadville	3/30/73	7.8	3.6	3.1	3.6
Twin Lakes Tunnel	3/30/73	4.5	2.5	1.5	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	3/26/73	10.7	4.8	5.4	6.0
Rio Grande					
Bristol View	3/30/73	6.1	4.9	5.7	3.7
LaVeta Pass	3/26/73	11.9	8.6	7.6	8.7
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	NR	6.7	---	4.4	3.1
Chamita	3/31	8.0	5.0	5.2	4.6
Rio Grande					
Aqua Piedra	NR	7.2	---	4.8	4.5
Big Tesuque	NR	3.7	---	2.6	2.1
Rio En Medio	NR	3.5	---	2.4	1.3
Taos Canyon	NR	3.3	---	2.7	2.6
Red River					
Red Summit	NR	4.9	---	1.6	1.8

"ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	3/29/73	9.1	5.1	5.3	6.7
Mineral Creek	3/29/73	5.7	3.0	3.1	3.3
Molas Lake	3/29/73	9.4	5.7	3.7	4.3
Dolores River					
Dolores	3/29/73	19.6	18.2	NS	8.9
Lizzard Head	3/29/73	11.8	2.5	4.4	5.7
Rico	3/29/73	13.8	8.2	10.5	8.9
GUNNISON BASIN					
Gunnison River					
King	3/28/73	3.3	2.3	2.1	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	3/30/73	4.2	2.3	2.6	2.5
Colorado River					
Berthoud Pass	3/29/73	3.9	3.2	2.5	2.6
Gore	3/28/73	4.9	2.7	3.1	2.4
Grand Mesa	3/30/73	12.5	11.6	9.3	9.6
Ranch Creek	3/28/73	8.7	5.7	5.0	5.3
Vail	3/29/73	12.3	8.0	9.0	8.5
Roaring Fork River					
Placita	3/28/73	9.3	7.7	5.8	6.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	3/30/73	13.1	11.7	13.0	7.5

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State and private organizations.

AS OF
MAY 1, 1973

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

COVER PHOTO NUMBER ORC-286-4

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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RONALD E. MORELAND, Assistant Snow Survey Supervisor

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SNOW SURVEY UNIT
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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fart Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremant, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservatian Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Sail Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Sail Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Canservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, Sauth Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

May 1, 1973

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of

May 1, 1973

THE SNOWPACK INCREASED IN BOTH STATES MORE THAN THE 15 YEAR NORMAL DURING APRIL. THIS MAY REFLECT THE BELOW AVERAGE TEMPERATURES AND LACK OF ANY SNOWMELT. SNOWFALL DURING THE LAST WEEK OF APRIL WAS VERY GENERAL AND HEAVY AT THE LOWER ELEVATIONS. WATER SUPPLIES WILL BE ADEQUATE IN BOTH STATES. SOIL IN THE IRRIGATED AREAS OF BOTH STATES ARE WET -- SO WET IN SOME AREAS THAT PLANTING IS IMPOSSIBLE.

COLORADO

STREAMS SHOULD PROVIDE ADEQUATE WATER OVER THE ENTIRE STATE. SOME HIGH WATER CAN BE EXPECTED IN THE RIO GRANDE, SAN JUAN, ANIMAS, DOLORES AND GUNNISON DRAINAGES. THE EXTENT OF HIGH WATER WILL DEPEND UPON TEMPERATURES AND PRECIPITATION DURING SNOWMELT. ALL AREAS REPORT THE IRRIGATED AREAS AS WET OR TOO WET. THE SOUTH PLATTE AREAS HAVE GOOD STORAGE OTHER AREAS ARE NEAR NORMAL EXCEPT ARKANSAS. THE ARKANSAS BASIN WILL HAVE TO DEPEND HEAVILY UPON STREAMFLOW OR PUMPING FOR MOST IRRIGATION. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

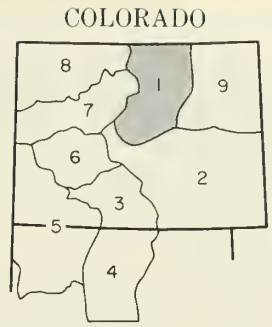
NEW MEXICO

STREAMFLOW SHOULD BE MUCH ABOVE NORMAL ON ALL OF THE SNOW-FED STREAMS IN NEW MEXICO. SOME OF THE SNOWPACK IS A MAXIMUM OF RECORD. HIGH WATER CAN BE EXPECTED ON THE SAN JUAN, PECOS, THE RIO GRANDE MAINSTEM AND ITS TRIBUTARIES. PROBABLY ALL STREAMS IN THE NORTHERN THIRD OF THE STATE WILL HAVE SOME HIGH WATER. TEMPERATURES AND PRECIPITATION DURING THE SNOW-MELT PERIOD WILL DICTATE FLOWS. SOILS ARE EXTREMELY WET IN BOTH VALLEYS AND MOUNTAINS. CARRY-OVER STORAGE IS GOOD.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE ADEQUATE ON THE UPPER SOUTH PLATTE. ALL STREAMS ARE BEING FORECAST AT NEAR THE 1953-67 AVERAGE. CARRY-OVER STORAGE IS EXCELLENT AND SHOULD PROVIDE GOOD SUPPLEMENTAL SUPPLIES IN AREAS WHERE STREAMFLOW IS NOT ADEQUATE. SNOWPACK IS NOW CONSIDERABLY ABOVE NORMAL, BUT ONLY AT LOW ELEVATIONS. PERSISTENT WARM TEMPERATURES COULD BRING THIS WATER DOWN RAPIDLY.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	95	95	100
Boulder at Orodell	48	99	49
Cache La Poudre at Canyon Mouth (2)	220	102	215
Clear Cr. at Golden (3)	120	101	119
St. Vrain at Lyons (4)	70	100	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	4	104	109
Boulder	3	159	132
Cache La Poudre	8	144	166
Clear Creek	6	131	106
Saint Vrain	3	183	148
South Platte	3	100	122

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	2	86	83
Boulder	1	87	118
Cache La Poudre	2	71	75
Clear Creek	2	91	94
Saint Vrain	2	77	95
South Platte	2	87	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	28.0	26.8	23.0
Black Hollow	8.0	4.5	4.8	3.5
Boyd Lake	44.0	37.5	36.4	27.7
Cache La Poudre	9.5	8.8	8.2	8.0
Carter Lake	108.9	106.0	107.2	86.4
Chambers Lake	8.8	5.0	2.3	3.3
Cheesman	79.0	56.5	74.0	50.2
Cobb Lake	34.0	20.1	20.1	9.8
Eleven Mile	97.8	91.7	81.0	72.9
Fossil Creek	11.6	10.3	8.1	7.0
Gross	43.1	19.7	18.3	17.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6.4	6.4	4.3	5.6
Horsetooth	143.5	130.0	134.0	116.9
Lake Loveland	14.3	10.9	12.2	9.0
Lone Tree	9.2	8.9	8.0	7.9
Mariano	5.4	5.7	5.2	2.0
Marshall	10.3	5.6	6.5	4.0
Marston	18.0	16.5	14.7	15.5
Milton	24.4	18.1	18.1	11.0
Standley	42.0	28.1	31.1	11.9
Terry Lake	8.2	6.3	5.9	5.3
Union	12.7	10.9	12.1	8.0
Windsor	18.6	14.8	13.6	14.7

+ 1953-1967 period

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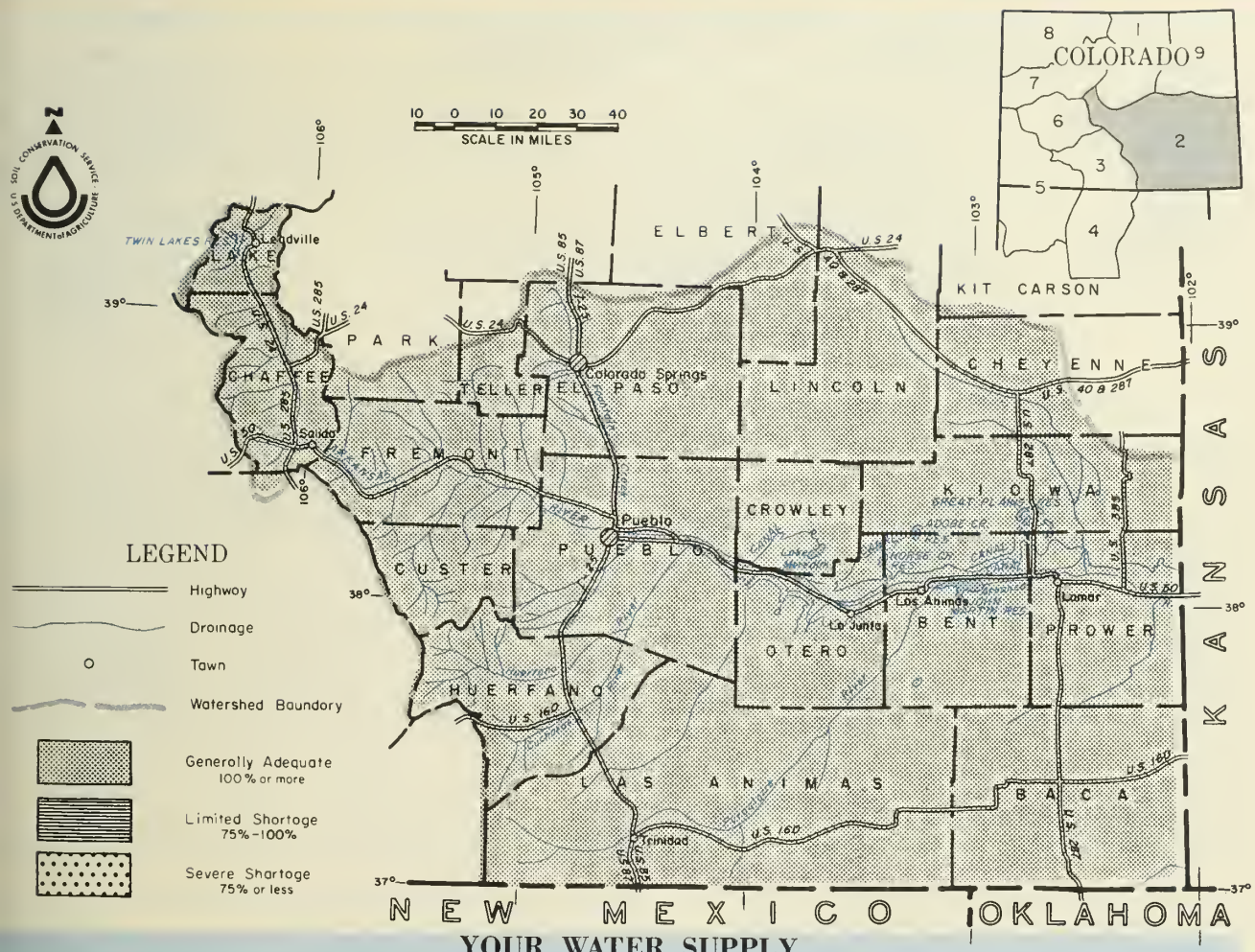
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES SHOULD BE ADEQUATE IN THE ARKANSAS DRAINAGE THIS SUMMER. FORECASTS WERE INCREASED SLIGHTLY DURING THE MONTH AND NOW RANGE FROM 123 PERCENT OF NORMAL ON THE MAINSTEM TO 167 PERCENT ON THE CUCHARAS. FLOW ON THE SMALL TRIBUTARIES SHOULD ALSO BE ADEQUATE. SOIL MOISTURE CONDITIONS ARE LISTED AS EXCELLENT. SOME OBSERVERS INDICATED TOO MUCH MOISTURE FOR PLANTING. CARRY-OVER STORAGE IS POOR. WATER SUPPLIES WILL COME PRINCIPALLY FROM STREAMFLOW AND PUMPING.

This report prepared by
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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	375	126	298
Arkansas nr Salida (1)	380	123	309
Cucharas nr La Veta	20	167	12
Purgatoire at Trinidad	60	130	46

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	155	142
Cucharas	2	---	1370
Purgatoire	1	---	540

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	131	104
Cucharas and Purgatoire	1	94	83

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	0.0	12.1	10.6
Clear Creek	11.4		5.0	6.4
Cucharas	40.0	0.0	0.0	35.9
Great Plains	150.0	48.2	45.4	35.9
Horse Creek	26.9	0.0	0.0	4.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	40.9	0.0	67.9
Meredith	41.9	22.6	7.2	9.3
Model	15.0		0.9	2.4
Turquoise	130.0	50.7	56.3	6.2
Twin Lakes	57.9	26.9	19.2	17.7

+ 1953-1967 period

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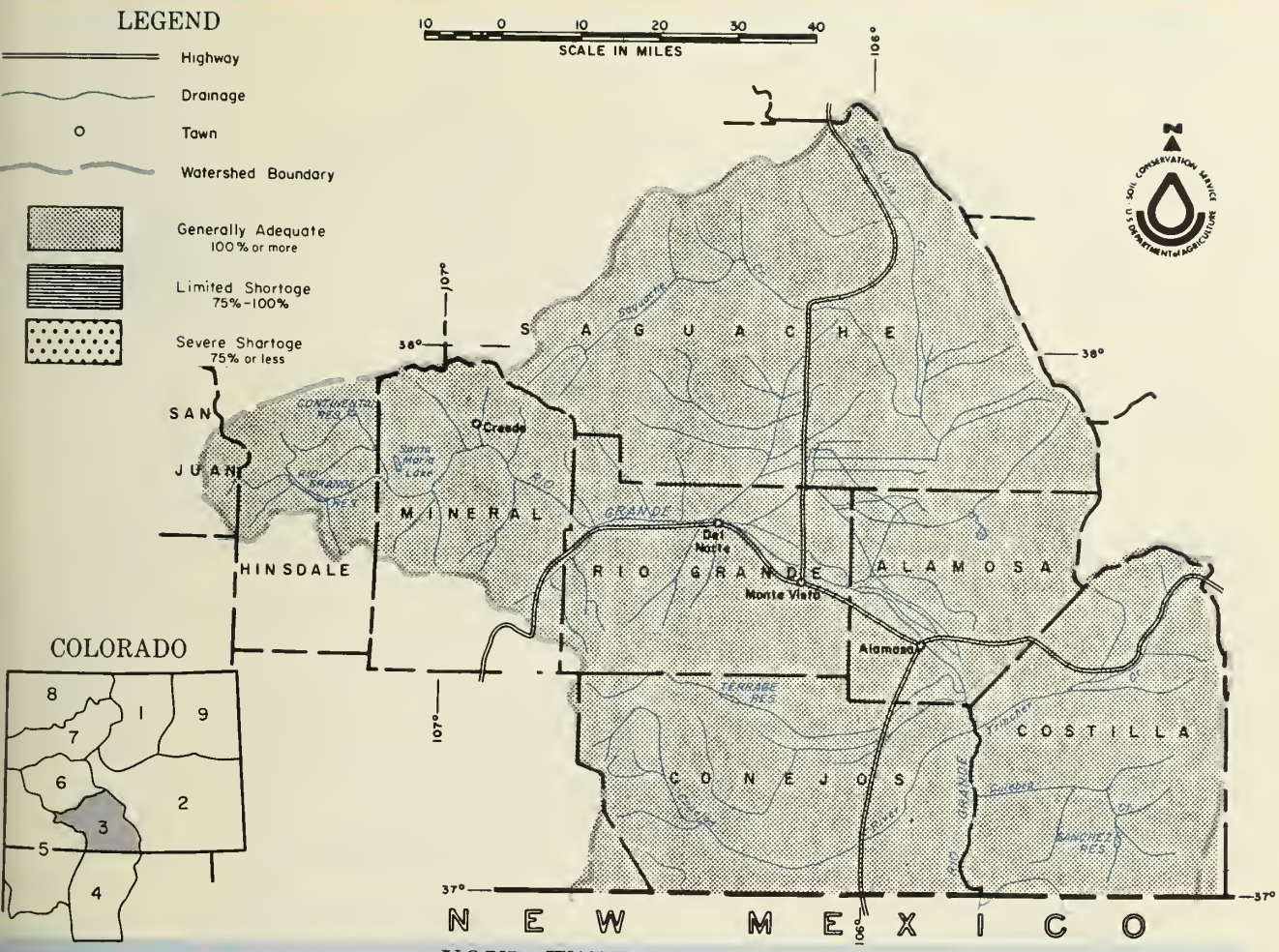
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE RAISED AGAIN THIS MONTH. FORECASTS NOW RANGE UPWARDS FROM 150 PERCENT OF THE 15 YEAR NORMAL. LOW ELEVATION SNOWS ARE SLOW TO MELT. SOME HIGH WATER IS LIKELY EVEN IF TEMPERATURES ARE NORMAL. TEMPERATURES AND PRECIPITATION WILL PLAY A LARGE PART IN THE RUNOFF THIS YEAR. VALLEY SOILS ARE EXTREMELY WET. RESERVOIR STORAGE IS SLIGHTLY BETTER THAN NORMAL.

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DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	93	150	62
Conejos nr Mogote (1)	270	148	182
Culebra at San Luis (2)	36	189	19
Rio Grande at 30 Mile Bridge (3)	183	156	117
Rio Grande nr Del Norte (3)	680	155	438
South Fork at South Fork	175	159	110

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Exc.
Sangre de Cristo Cr.	Exc.	Exc.
Trinchera	Exc.	Exc.

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	232	196
Conejos	3	---	232
Culebra	2	---	625
Rio Grande	10	311	187

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	91	87
Conejos	1	91	73
Culebra	1	94	83
Rio Grande	2	93	91

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	6.1	6.2	5.8
Platoro	60.0	2.9	4.4	8.1
Rio Grande	45.8	21.0	18.0	15.0

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2		7.3	12.3
Santa Maria	45.0	5.8	6.6	6.9
Terrace	17.7	6.8	6.7	5.7

+ 1953-1967 perio

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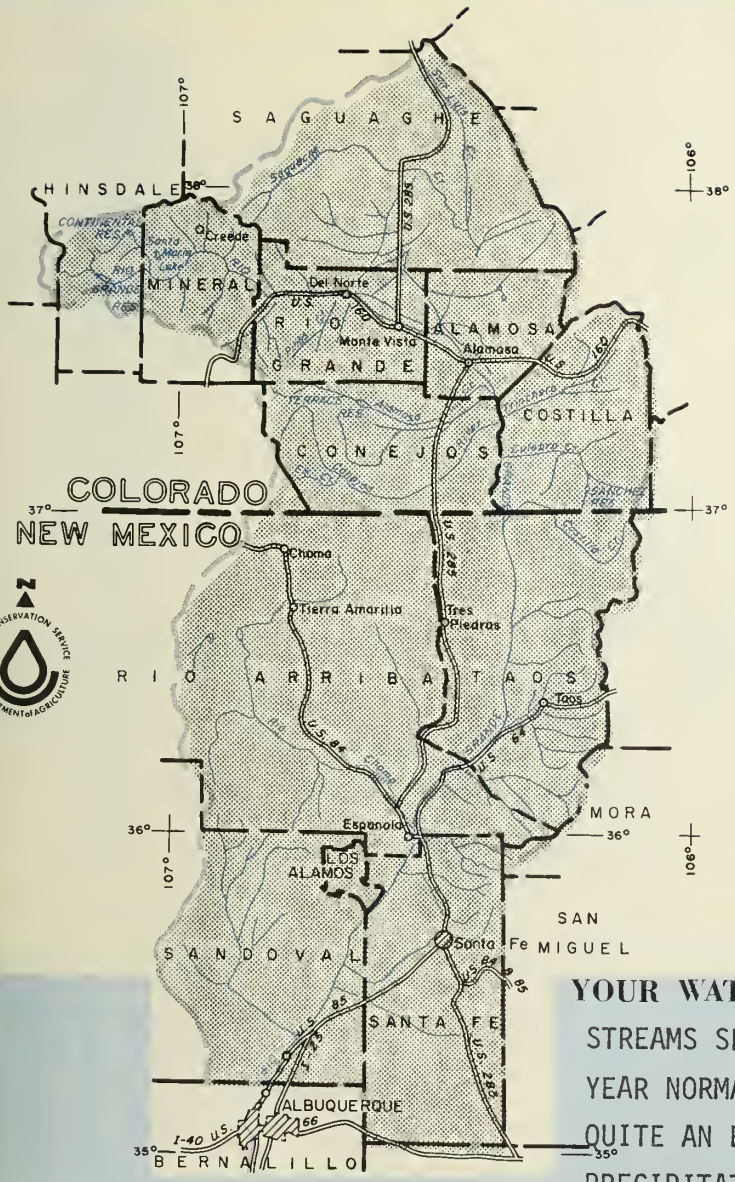
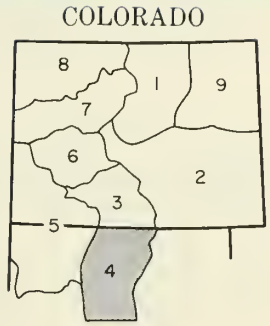
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

STREAMS SHOULD FLOW ABOVE 150 OF THE 15 YEAR NORMALS. PEAK FLOWS WILL DEPEND TO QUITE AN EXTENT UPON TEMPERATURES AND PRECIPITATION; HOWEVER, HIGH WATER CAN BE EXPECTED IN THE LOW AREA ON THE MAINSTEM OF THE RIO GRANDE AND ALL ITS TRIBUTARIES. SOILS ARE WET. CARRY-OVER STORAGE IS ABOUT NORMAL. SMALL STREAMS SHOULD PROVIDE GOOD WATER SUPPLIES ALL SUMMER.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	33	180	18
Pecos at Pecos	90	220	41
Rio Chama at El Vado	305	162	188
Rio Grande at Otowi(2)	885	172	513
Rio Grande at San Mar. (2)	690	207	334
Rio Hondo nr Valdez	26	173	15
Red River at Mouth nr Questa	52	163	32

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc.	Exc.
Jemez River	Exc.	Exc.
Mora River	Exc.	Exc.
Nambe Creek	Exc.	Exc.
Rio Ojo Caliante	Exc.	Exc.
Rio Pueblo de Taos	Exc.	Exc.
Santa Fe Creek	Exc.	Exc.

The forecast of the Rio Grande at San Marcial is % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Snow not normally measured May 1.			

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	100	4	64
Caballo	344	72	41	75
Conchas	273	189	68	150
Elephant Butte	2195	385	172	322

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	74	8	31
McMillen-Avalon	32	20	20	12

+ 1953-1967 period.

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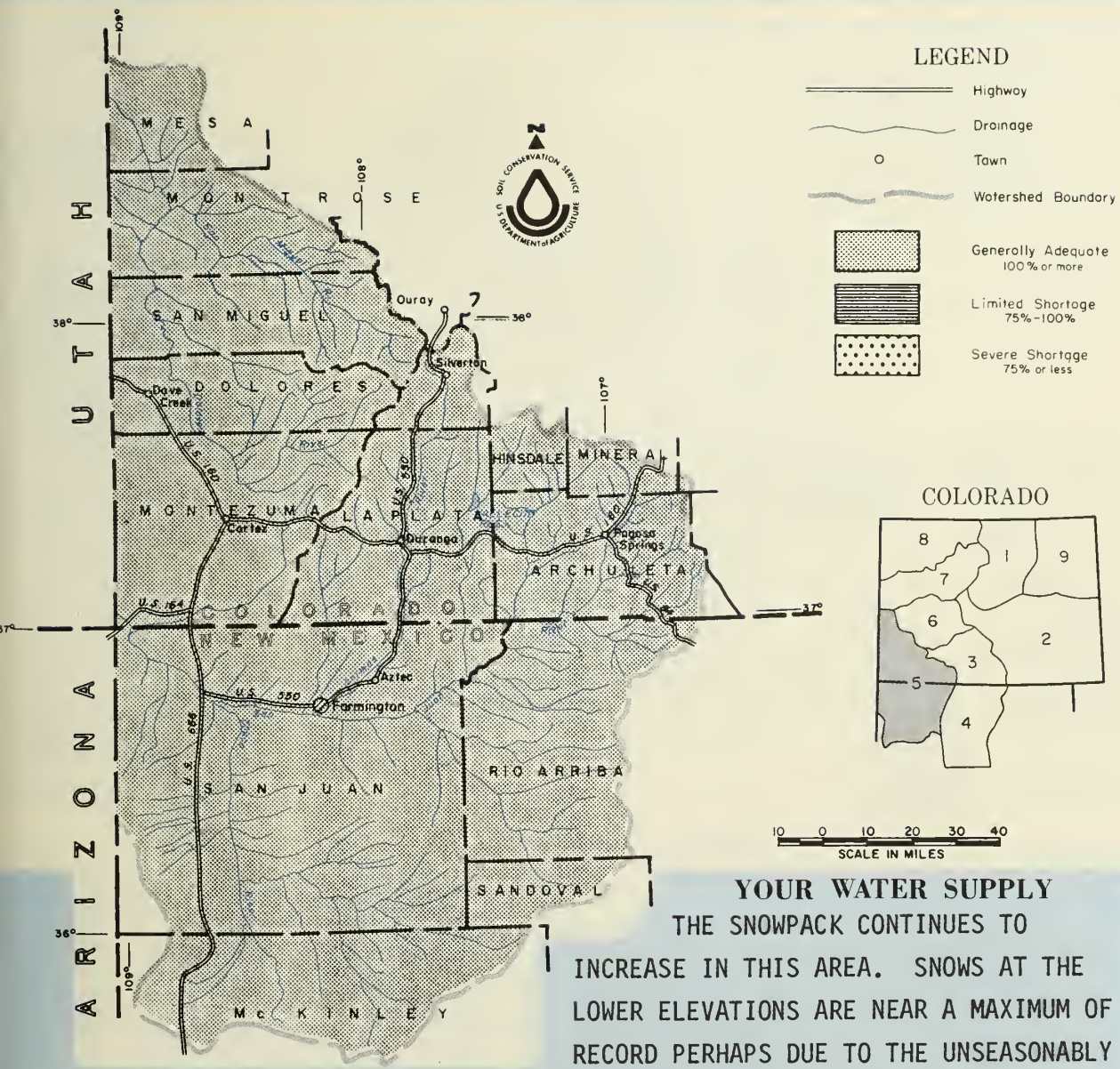
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of

May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK CONTINUES TO INCREASE IN THIS AREA. SNOWS AT THE LOWER ELEVATIONS ARE NEAR A MAXIMUM OF RECORD PERHAPS DUE TO THE UNSEASONABLY COOL TEMPERATURES. SNOWMELT HAS BEEN DELAYED. THE REMAINING LOW AND MEDIUM ELEVATION SNOW WOULD MELT RAPIDLY WITH WARM TEMPERATURES. HIGH WATER CAN BE EXPECTED IN THE NEW FLOOD PLAINS. TEMPERATURES AND PRECIPITATION WILL REGULATE PEAK FLOWS. SOILS ARE WET OVER MOST OF THE AREA.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sep

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	615	150	409
Dolores at Dolores	380	165	231
La Plata at Hesperus	40	167	24
Los Pinos at Bayfield (1)	305	157	194
Piedra Cr. at Piedra	260	160	163
San Juan at Carracas	625	165	379
Inflow to Navajo Res. (1) (Apr-Jul)	1050	170	619

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Exc.
Mancos	Exc.	Exc.
San Miguel	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	315	190
Dolores	4	1800	271
San Juan	3	301	158

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	101	88
Dolores	3	178	105
San Juan	3	101	88

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	7	12	9
Lemon	40	16	26	19
Narraguinnep		16		
Navajo	1696	1170	847	326
Vallecito	126	58	79	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1953-1967 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE SNOWPACK INCREASED FANTASTICALLY DURING APRIL. SOME AREAS INCREASED AS MUCH AS 60 PERCENT. IT IS FELT THESE INCREASES MAY BE DUE IN PART TO THE COLD TEMPERATURES. THERE WAS LITTLE SNOWMELT. STREAMFLOW WAS GENERALLY BELOW NORMAL. THERE WILL BE ADEQUATE WATER OVER THE BASIN. FORECASTS WERE INCREASED IN SOME CASES AS MUCH AS 40 PERCENT. CARRY-OVER RESERVOIR STORAGE IS SIMILAR TO LAST YEAR, BUT SLIGHTLY LESS. VALLEY SOILS ARE IN GOOD CONDITION.

This report prepared by

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Issued by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Gunnison R. inflow to Blue Mesa (1)	850	111	767
Gunnison nr Grand Junction (2)	1800	158	1137
N. Fork of Gunnison(3)	370	143	258
Surface Creek nr Cedaridge	22	138	16
Uncompahgre at Colona	200	155	129

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc.	Exc.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	273	160
Surface Creek	3	237	153
Uncompahgre	3	236	177

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	126	126
Surface Creek	1	110	122
Uncompahgre	1	110	122

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	305	319	--
Morrow Point	121	115	116	--
Taylor	106	42	77	59

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1953-1967 period.

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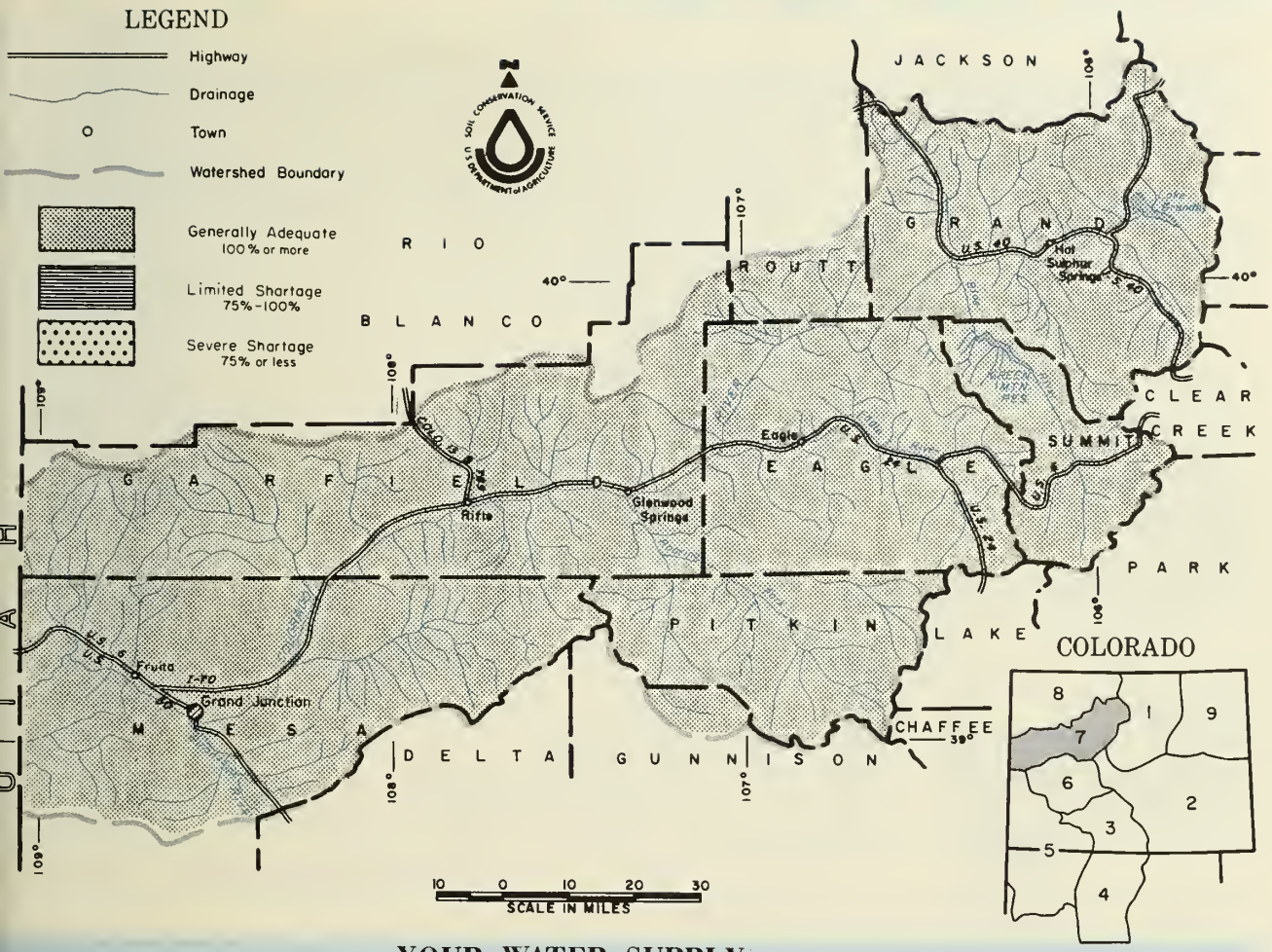
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE RAISED 10 TO 15 PERCENT AS OF MAY 1. THE SNOWPACK IN SOME PLACES INCREASED AS MUCH AS 60 PERCENT DURING THE MONTH OF APRIL. SINCE THE MONTH WAS QUITE COLD, PROBABLY SNOWMELT WAS AT A MINIMUM ACCOUNTING FOR THE LARGE SNOWPACK INCREASE. THERE SHOULD BE NO WATER SHORTAGES THIS SUMMER. VALLEY SOILS ARE WET. RESERVOIR CARRY-OVER STORAGE IS BETTER THAN NORMAL OVER THE BASIN.

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GLENWOOD SPRINGS, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue inflow to Dillon	145	95	153
Blue abv Green Mt.(1)	225	95	236
Colo. R. inflow to Granby Res. (2)	220	100	219
Colo. R. nr Dotsero(3)	1600	116	1375
Roaring Fork at Glenwood Springs (4)	900	130	692
Williams Fork nr Par. (5)	65	108	60
Willow Creek inflow to Willow Cr. Reservoir	53	115	46
Colo. nr Cameo (6)	2500	113	2216

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Gra as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1) (2) and (5) plus Moffat Di and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus ch in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4)

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	104	107
Colorado	21	134	132
Plateau	3	212	145
Roaring Fork	5	223	165
Williams Fork	3	169	151
Willow	2	188	143

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	117	113
Colorado	5	99	98
Roaring Fork	1	95	100
Willow	2	188	143

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	219	236	233
Granby	466	381	319	205
Green Mountain	147	66	51	43
Homestake	43	18	3	---

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	54	61	--
Vega	32	16	18	13
Williams Fork	97	56	56	34
Willow Creek	9	7	7	--

+ 1953-1967 period

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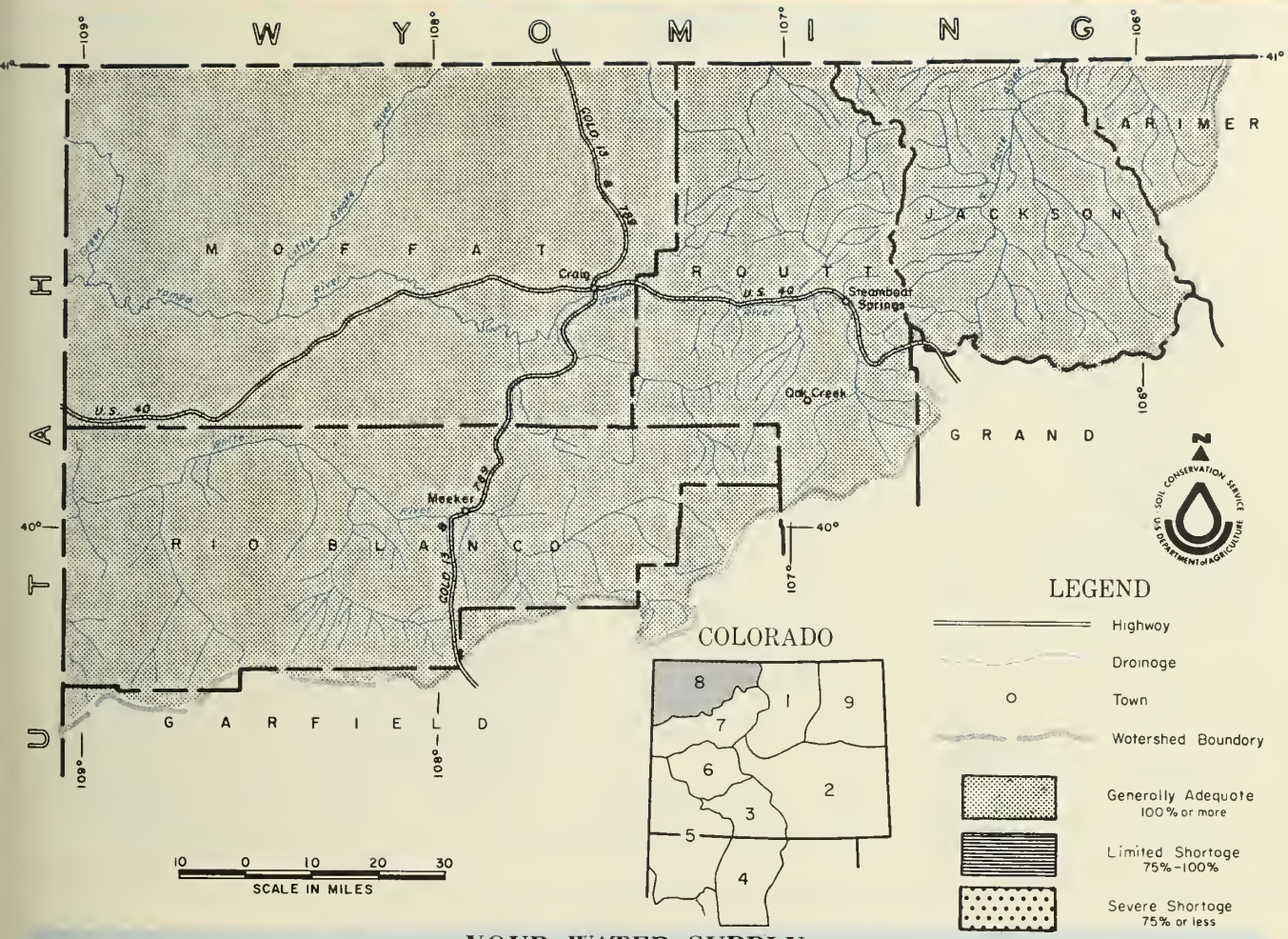
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
May 1, 1973

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLY FORECASTS WERE UP SLIGHTLY IN THIS AREA. SNOWFALL WAS ABOVE NORMAL OVER THE BASIN. STREAMS ARE STARTING TO RISE. SMALL TRIBUTARY STREAMS SHOULD BE EXCELLENT IN THE EARLY PART OF THE SEASON AND AT LEAST ADEQUATE LATER. SOILS ARE EXTREMELY WET IN SOME LOCATIONS, PREVENTING PLANTING. MOUNTAIN SOILS CONTAIN ABOUT NORMAL AMOUNTS OF MOISTURE.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	200	105	191
Laramie at Jelm	70	115	61
Little Snake at Lily	285	103	277
North Platte at Northgate	277	129	215
White nr Meeker	320	109	293
Yampa nr Maybell	940	110	853
Yampa at Steamboat Springs	290	112	260

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	3	280	154
Laramie	3	121	132
North Platte	5	146	135
White	2	227	145
Yampa	6	156	136

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	71	75
North Platte	2	78	99
Yampa	1	101	129

+ 1953-1967 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

May 1, 1973

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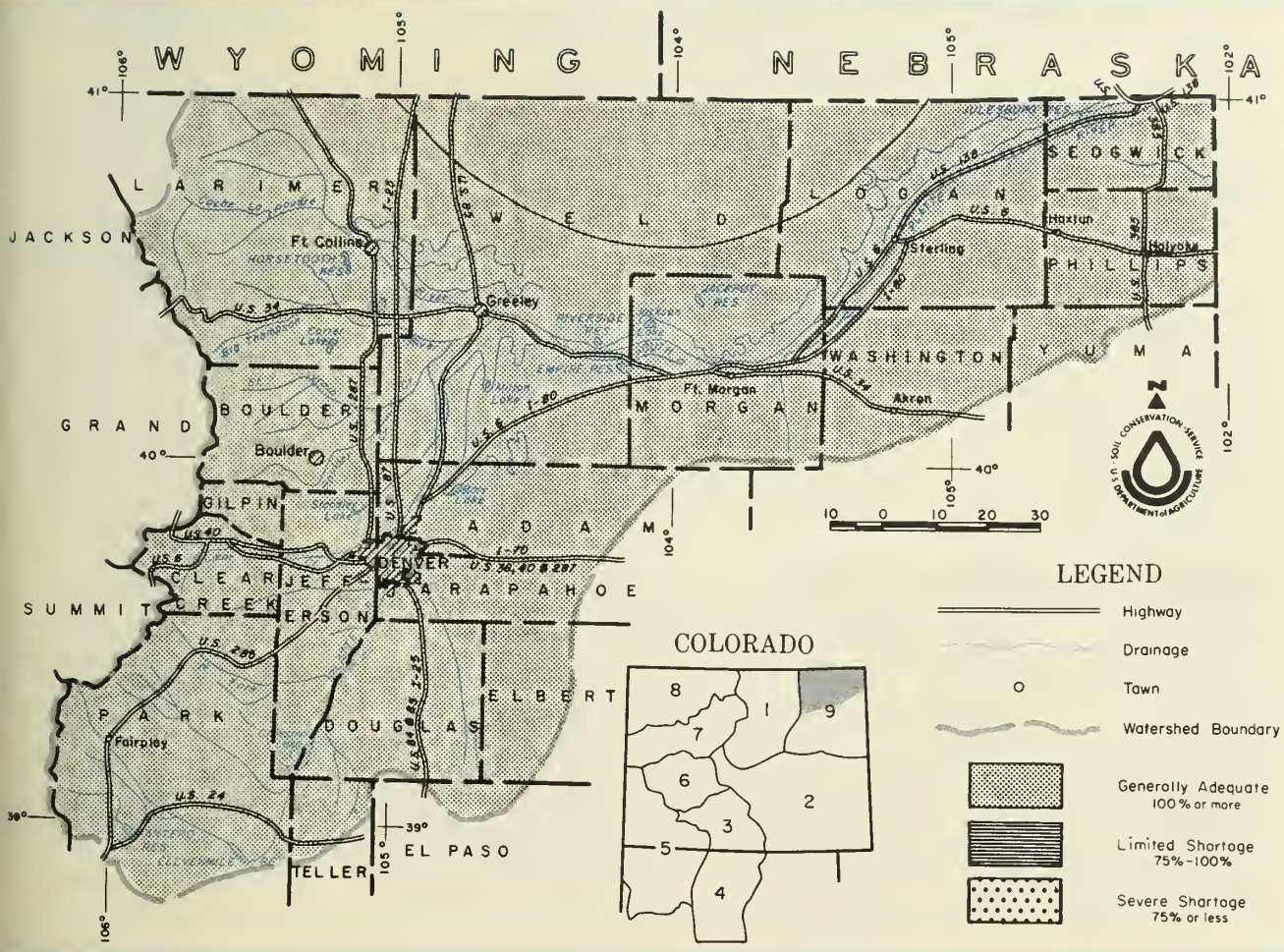

YOUR WATER SUPPLY

STREAMFLOWS SHOULD BE NEAR AVERAGE FOR THE LOWER SOUTH PLATTE THIS SUMMER. FORECASTS WERE RAISED SLIGHTLY ON THE MAINSTEM AND ALL THE NORTHERN TRIBUTARIES. LOW ELEVATION SNOW IS EXTREMELY HIGH FOR THIS TIME OF YEAR. CARRY-OVER STORAGE IS 118 PERCENT OF AVERAGE AND JUST ABOUT THE SAME AS LAST YEAR AT THIS TIME. SOILS ARE WET.

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STERLING, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	95	95	100
Boulder at Orodell	48	99	49
Cache La Poudre at Canyon Mouth (2)	220	102	215
Clear Creek at Golden (3)	120	101	119
Saint Vrain at Lyons (4)	70	100	70

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	4	104	109
Boulder	3	159	132
Cache La Poudre	8	144	166
Clear Creek	6	131	106
Saint Vrain	3	183	148
South Platte	3	100	122

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	2	86	83
Boulder	1	87	118
Cache La Poudre	2	71	75
Clear Creek	2	91	94
Saint Vrain	2	77	95
South Platte	2	87	87

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	106.0	107.2	86.4
Cheesman	79.0	56.5	74.0	50.2
Eleven Mile	97.8	91.7	81.0	72.9
Empire	37.7	34.0	33.1	29.0
Horsetooth	143.5	130.0	134.0	116.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	34.7	33.7	33.7
Julesburg	28.2	23.1	23.6	22.1
Prewitt	32.8	28.6	25.6	17.5
Point of Rocks	70.0	70.6	63.2	60.8
Riverside	57.5	59.9	58.6	51.0

+ 1953-1967 period

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"The Conservation of Water begins with the Snow Survey"

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1973

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES) LAST YEAR	WATER CONTENT (INCHES) AVG. 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	5/2	65	20.9	19.5	17.1
McIntyre	4/26	50	13.9	10.7	9.4
Roach	4/27	76	25.0	19.1	18.7
North Platte River					
Cameron Pass	4/30	93	36.9	32.6	28.4
Columbine Lodge	4/26	57	21.0	18.9	21.4
Northgate	4/30	28	9.0	0.3	2.7
Park View	4/26	41	11.2	3.3	5.6
Willow Cr. Pass (B)	4/26	47	13.7	7.8	10.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/27	32	10.0	0.5	2.9
Boulder Falls	4/28	52	15.9	9.9	11.9
University Camp	4/28	63	20.9	19.0	20.7
Big Thompson River					
Deer Ridge	4/27	22	6.5	0.1	2.6
Hidden Valley	NS			8.5	12.0
Lake Irene (8)	4/28	68	23.1	24.0	22.4
Long's Peak	4/25	54	13.5	12.2	12.0
Two Mile	4/27	58	15.7	20.0	17.0
Cache La Poudre					
Bennett Creek	4/26	45	12.5	1.0	---
Big South	4/26	9	3.2	1.9	0.6
Cameron Pass	4/30	93	36.9	32.6	28.4
Chambers Lake	4/26	33	12.2	4.9	5.3
Deadman Hill	5/2	65	20.9	19.5	17.1
Hour Glass Lake	4/26	42	11.3	4.9	5.6
Joe Wright	4/30	86	31.8	27.8	---
Lost Lake	4/26	41	12.2	13.0	8.9
Pine Creek	5/2	19	6.3	0.5	0.1
Red Feather	5/2	41	13.9	5.9	4.4
Clear Creek					
Baltimore	4/27	22	6.5	0.5	2.9
Berthoud Falls	4/27	51	16.9	9.5	12.1
Empire	4/27	31	9.5	2.3	6.8
Grizzly Peak (B)	4/26	60	16.5	21.0	19.4
Loveland Lift	4/27	71	20.8	16.1	25.3
Loveland Pass	4/27	50	15.7	16.0	14.5
Saint Vrain River					
Copeland Lake	4/27	24	6.1	0.6	1.7
Ward	4/27	39	10.3	2.0	5.4
Wild Basin	4/27	46	12.1	13.0	12.2
South Platte River					
Como	4/25	34	9.0	3.6	---
Geneva Park	4/30	19	3.9	1.3	1.2
Horseshoe Mountain	4/24	40	10.5	12.6	---
Hoosier Pass	4/25	44	11.2	14.2	12.0
Jefferson Creek	4/26	38	9.7	9.4	7.1
Mosquito	4/25	38	10.9	3.5	---
Trout Creek Pass	4/24	27	7.1	0.0	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/26	45	13.1	0.0	2.2
Cooper Hill (B)	4/27	51	11.0	10.8	11.1
East Fork	4/30	32	8.7	6.8	7.4
Four Mile Park	4/30	7	1.9	0.0	1.0
Fremont Pass	4/30	56	17.4	18.9	17.9
Garfield	4/27	47	17.8	5.2	8.5
Hermit Lake	4/25	38	10.4	0.0	---
Monarch Pass	4/27	59	20.6	13.1	16.5
Tennessee Pass	4/30	39	7.1	8.2	7.7
Twin Lakes Tunnel	4/27	36	12.9	12.1	8.7
Westcliffe	4/25	23	6.2	0.0	1.0

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTEN (INCHES) LAST YEAR	WATER CONTEN (INCHES) AVG. 53 67
Cucharas River					
Blue Lakes	4/27	27	11.3	0.0	0.5
Cucharas Pass	4/27	48	17.4	0.0	---
La Veta Pass (B)	4/27	43	17.5	0.0	1.6
Purgatoire River					
Bourbon	4/26	40	9.2	0.0	1.7
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/25	32	9.0	0.0	0.6
Summitville	4/26	83	29.5	16.6	19.0
Conejos River					
Cumbres	5/2	68	29.8	0.0	12.6
LaManga	5/2	74	30.0	4.1	---
Platoro	4/29	58	19.8	1.7	9.9
River Springs	5/1	10	3.7	0.0	0.5
Culebra River					
Brown Cabin	4/28	29	8.2	---	---
Cottonwood (B)	NS			---	---
Culebra	4/24	48	14.4	0.0	3.5
La Veta Pass (8)	4/27	43	17.5	0.0	1.6
Trinchera (B)	4/28	47	15.3	---	---
Rio Grande					
Cochetopa Pass	4/26	31	8.9	1.1	2.6
Grayback	5/1	70	21.2	2.7	---
Hiway	4/30	91	35.5	21.0	28.1
Lake Humphrey	4/27	27	8.4	0.5	0.4
Love Lake	4/27	48	13.3	0.0	---
Pass Creek	4/30	39	13.2	0.0	3.9
Pool Table	4/27	32	7.9	0.3	1.9
Porcupine	4/28	39	10.0	2.6	6.6
Santa Maria	4/27	18	4.4	0.0	0.5
Upper Rio Grande	4/27	42	12.7	0.0	1.8
Wolf Creek Pass	4/30	84	36.9	5.3	22.0
Wolf Cr. Summit (B)	4/30	113	44.9	27.9	30.0
SAN JUAN-DOLORES					
Animas River					
Cascade	4/26	42	17.5	0.0	3.6
Lemon	4/27	30	12.1	0.0	---
Mineral Creek	4/26	61	21.5	3.6	10.5
Molas Lake	4/26	44	14.9	1.2	6.8
Purgatory	4/27	80	33.1	10.8	---
Red Mt. Pass (B)	4/26	102	39.6	28.3	30.3
Silverton Sub-Sta.	4/26	23	10.5	0.0	0.1
Spud Mountain	4/26	83	35.8	11.3	22.2
Dolores River					
Lizzard Head	4/29	58	22.8	3.1	12.9
Lone Cone	4/30	43	18.4	0.9	---
Rico	4/29	23	9.4	0.0	0.4
Telluride	4/27	28	9.9	0.0	0.8
Trout Lake	4/27	52	19.2	0.3	8.5
San Juan River					
Chama Divide (B)	5/2	0	0.0	0.0	---
Chamita (B)	5/2	0	0.0	0.0	---
Upper San Juan	4/30	97	42.2	7.9	26.6
Wolf Creek Pass (B)	4/30	84	36.9	5.3	22.0
Wolf Cr. Summit	4/30	113	44.9	27.9	30.0

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1973

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/27	78	31.2	14.5	21.0
Blue Mesa	4/27	22	6.6	0.0	1.9
Butte	4/27	48	14.2	11.3	---
Cochetopa Pass (B)	4/26	31	8.9	1.1	2.6
Crested Butte	4/27	32	12.8	0.2	7.1
Keystone	4/27	58	21.9	15.1	17.1
Lake City	4/25	33	8.0	1.2	3.5
Mesa Lakes (B)	4/27	67	28.9	8.2	15.1
McClure Pass	4/26	50	20.1	0.0	9.3
Park Cone	4/26	31	8.3	4.4	7.7
Park Reservoir	4/30	79	31.2	15.8	23.6
Porphyry Creek	4/27	66	22.5	11.5	16.5
Tomichi	4/27	49	16.5	7.4	10.0
Surface Creek					
Alexander Lake	4/27	78	31.2	14.5	21.0
Mesa Lakes (B)	4/27	67	28.9	8.2	15.1
Park Reservoir	4/30	79	31.2	15.8	23.6
Uncompahgre River					
Ironton Park	4/27	48	17.3	0.0	6.7
Red Mountain Pass	4/26	102	39.6	28.3	30.3
Telluride (B)	4/27	28	9.9	0.0	0.8
COLORADO BASIN (Main)					
Blue River					
Blue River	4/25	35	9.0	4.1	6.4
Fremont Pass	4/30	56	17.4	18.9	17.9
Frisco	4/26	28	8.0	2.4	4.6
Grizzly Peak	4/26	60	16.5	21.0	19.4
Hoosier Pass (B)	4/25	44	11.2	14.2	12.0
Shrine Pass	4/26	67	19.1	23.3	18.7
Snake River	4/26	18	5.3	1.0	3.5
Summit Ranch	4/27	26	6.9	4.8	4.8
Colorado River					
Arrow	4/27	44	15.0	10.0	9.2
Berthoud Pass	4/25	58	18.0	17.4	14.3
Berthoud Summit	4/27	72	21.7	22.0	20.6
Cooper Hill	4/27	51	11.0	10.8	11.1
Fiddler Gulch	4/27	59	13.6	11.6	14.7
Glenmar Ranch	4/26	28	10.0	1.3	3.8
Gore Pass	4/27	34	10.2	6.8	7.3
Grand Lake	4/29	28	8.3	2.3	3.4
Lake Irene	4/28	68	23.1	24.0	22.4
Lapland	4/26	38	10.4	8.6	6.9
Lulu	4/29	69	22.3	23.4	18.3
Lynx Pass	4/27	43	13.9	6.1	7.1
McKenzie Gulch	4/25	25	7.6	0.5	0.6
Middle Fork	4/26	33	10.4	2.9	5.7
Milner	4/28	40	11.9	10.8	12.0
North Inlet	4/28	31	8.9	3.6	5.9
Pando	4/30	33	11.2	7.0	7.7
Phantom Valley	4/28	31	9.8	1.7	6.2
Ranch Creek	4/27	43	12.3	10.0	9.0
Tennessee Pass (B)	4/30	39	7.1	8.2	7.7
Vail Pass	4/26	55	16.8	14.2	15.0
Vasquez	4/25	45	13.5	13.1	12.4
Roaring Fork River					
Aspen	4/28	59	21.0	21.7	16.0
Chapman	4/27	48	15.1	14.6	---
Independence Pass	4/27	55	17.9	15.1	16.2
Ivanhoe	4/27	68	23.3	21.0	17.3
Kiln	4/27	44	12.9	13.8	---
Last Chance	4/27	48	15.3	14.4	---
Lift	4/28	62	22.2	17.7	18.0
McClure Pass	4/26	50	20.1	0.0	9.3
Nast	4/27	22	7.1	0.0	1.8
North Lost Trail	4/26	45	17.8	2.5	7.5
Williams Fork River					
Glenmar Ranch	4/26	28	10.0	1.3	3.8
Jones Pass	4/26	57	17.2	18.0	15.4
Middle Fork	4/26	33	10.4	2.9	5.7
Willow Creek					
Granby	4/26	21	5.7	2.5	3.6
Willow Creek Pass	4/26	47	13.7	7.8	10.0
Plateau Creek					
Mesa Lakes	4/27	67	28.9	8.2	15.1
Park Reservoir	4/30	79	31.2	15.8	23.6
Trickle Divide	4/30	84	34.3	20.5	26.5
YAMPA BASIN					
Elk River					
Clark	4/25	22	8.4	0.0	3.1
Elk River	4/25	51	17.4	11.9	13.6
Hahn's Peak	4/25	33	12.0	1.6	7.8
White River					
Burro Mountain	4/26	61	20.7	8.8	14.5
Rio Blanco	4/25	44	13.6	6.3	9.1
Yampa River					
Bear River	4/30	30	10.0	4.9	7.4
Buffalo Pass	4/27	116	46.3	51.9	---
Columbine (B)	4/26	57	21.0	18.9	21.4
Dry Lake	4/25	60	21.9	14.0	15.2
Lynx Pass (B)	4/27	43	13.9	6.1	7.1
Rabbit Ears	4/26	93	30.9	26.9	25.9
Yampa View	4/26	52	18.4	3.8	8.4
Crosho	4/30	43	13.6	11.2	---
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	4/27	16	5.3	---	---
Rio Grande					
Big Tesuque	4/26	29	10.8	---	---
Hopewell	4/27	56	21.7	---	---
Rio En Medio	4/26	48	17.5	---	---
Sandoval	4/27	31	10.9	---	---
Taos Canyon	4/27	22	7.8	---	---
Tres Ritos	4/27	15	5.7	---	---
Red River					
Red River	4/27	29	10.0	---	---

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1973

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	4/26/73	11.1	8.5	10.7	8.6
Willow Pass	4/26/73	9.5	7.3	9.4	7.3
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	4/26/73	6.9	5.2	6.0	4.4
Big Thompson River					
Beaver Dam	4/27/73	7.1	3.6	5.4	4.9
Guard Station	4/26/73	6.9	3.2	---	4.5
Two Mile	4/27/73	9.1	4.9	4.5	5.4
Clear Creek					
Clear Creek	4/27/73	9.5	5.8	6.4	6.2
Hoop Creek	4/27/73	4.9	3.0	3.3	3.2
Cache La Poudre River					
Feather	5/2/73	10.1	5.5	9.7	8.1
Laramie Road	4/26/73	12.4	7.1	8.1	8.7
South Platte River					
Hoosier Pass	4/25/73	7.8	4.4	5.0	5.4
Kenosha Pass	4/26/73	4.4	3.4	4.0	3.6
ARKANSAS BASIN					
Arkansas River					
Garfield	4/27/73	6.7	5.6	4.2	4.7
Leadville	4/30/73	7.8	4.1	3.0	4.6
Twin Lakes Tunnel	4/30/73	4.5	3.0	2.5	2.9
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	4/23/73	10.7	6.2	6.8	8.5
Rio Grande					
Bristol View	4/27/73	6.1	5.4	5.9	4.9
La Veta Pass	4/23/73	11.9	9.5	10.1	11.5
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	4/26/73	9.1	6.2	5.5	7.1
Mineral Creek	4/26/73	5.7	3.0	3.2	4.2
Molas Lake	4/26/73	9.4	6.4	6.7	6.5
Dolores River					
Dolores	4/29/73	19.6	19.0	3.3	11.5
Lizzard Head	4/29/73	11.8	2.6	4.8	7.3
Rico	4/29/73	13.8	8.4	8.7	9.9
GUNNISON BASIN					
Gunnison River					
King	4/27/73	3.3	2.9	2.3	2.3
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	4/25/73	4.2	3.4	2.9	3.0
Colorado River					
Berthoud Pass	4/25/73	3.9	3.1	3.1	3.0
Gore	4/27/73	4.9	3.0	4.5	4.2
Grand Mesa	4/30/73	12.5	13.3	12.1	10.9
Ranch Creek	4/27/73	8.7	5.8	6.0	6.2
Vail	4/26/73	12.3	8.9	8.9	10.2
Roaring Fork River					
Placita	4/26/73	9.3	7.6	8.0	7.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	4/25/73	19.0	12.3	12.2	9.5

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

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Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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Prepared by
. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

ta included in this report were obtained by the agencies
med above in cooperation with the Bureau of Reclamation,
S. Forest Service, National Park Service, Corps of Engin-
rs and other Federal, State and private organizations.

MAY 15, JUNE 1, 1973
and
SPECIAL MEASUREMENTS

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter an spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delaye estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth ar water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snaw courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivaler and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow wat and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selecte streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 i cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Cen Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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In Cooperation with

JOHN PATRICK JORDAN

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Baone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prawers, Prowers, Kiowa County, West Otera, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Maffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1973

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1953-67 Average	Jan. 1 Last Year	Feb. 1 1953-67 Average
Berthoud Summit	12/28	31	8.5	7.2	6.8	10.8
Columbine Lodge	12/27	42	9.6	7.2	10.1	15.6
Fremont Pass	12/28	31	6.9	5.8	5.9	9.5
Mesa Lakes	12/26	31	8.0	6.5	11.5	10.3
Porphyry Creek	12/29	41	10.9	6.9	8.0	10.1
Red Mountain	12/27	68	20.7	11.4	19.1	17.0
Spud Mountain	12/27	46	15.4	9.7	19.2	15.0
Tennessee Pass	12/29	27	5.6	3.7	5.2	6.2
Two Mile	1/1	33	8.4	5.9	6.3	7.9
University Camp	12/28	28	7.3	7.1	5.1	10.9
Upper San Juan	12/29	73	20.9	13.6	20.7	19.4
Vail Pass	12/28	33	8.1	5.6	7.9	10.0
Wolf Creek Pass	12/29	69	19.2	13.1	18.7	17.8
Wolf Creek Summit	12/29	80	23.4	13.8	23.3	17.7

Only a limited number of snow courses are read January first. These few measurements indicate the general conditions on all the major river drainages. The snowpack is above average on every measured snow course. The southwest corner of the state has a substantially above normal pack. Wolf Creek Pass is 170 percent of normal and almost identical to last year.

The plains have had considerably more snow than usual.

Mountain soils are wet especially in the third and fourth foot.

The lower half of the state needs a considerably above normal snowpack to assure adequate water supplies this summer.

January 1, 1973

ADDITIONAL SNOW COURSE MEASUREMENTS

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Courses	Current Information			Water Content (Inches)		
	Date of Survey	Snow Depth Inches	Water Content Inches	Dec. 1, 1972	Jan. 1, 1972	Feb. 1 1953-67 Average
Buffalo Pass	12/26	76	18.1	--	20.1	--
Cascade	12/27	28	8.1	3.1	8.8	8.0
Clark	12/27	42	9.6	--	5.8	8.3
Deadman Hill	1/03	30	7.8	--	4.8	8.7
Dry Lake	12/26	40	9.4	--	9.6	12.2
Elk River	12/28	40	8.1	--	8.9	11.1
Fish Creek	12/26	74	17.3	--	18.3	--
Hahn's Peak	12/28	37	7.2	--	7.2	--
Hiway	12/29	64	17.8	9.5	18.3	15.7
Ironton Park	1/02	39	10.3	6.5	6.3	7.6
Joe Wright	12/27	49	12.0	8.1	10.9	--
Lemon #1	12/28	32	8.0	2.5	8.4	--
Lemon #2	12/28	35	8.9	2.9	10.4	--
Lizzard Head	12/29	43	10.8	5.4	14.0	9.4
Love Lake	12/29	39	9.5	4.7	10.0	--
Mineral Creek	12/27	37	10.5	6.1	10.9	8.9
Molas Lake	12/27	33	9.9	3.7	9.0	8.4
Monument	12/27	52	12.4	--	14.2	--
Pass Creek	12/29	45	10.8	4.3	9.0	8.9
Patrol Station	12/27	55	13.1	--	13.0	--
Pool Table	12/29	25	4.0	2.6	--	6.1
Purgatory	12/26	52	14.8	10.3	--	--
Rabbit Ears	1/02	55	14.2	--	--	15.9
Red Mountain	12/27	68	20.7	13.9	19.1	17.0
Rico	12/29	34	7.7	2.8	6.1	5.0
Round Mountain	12/26	80	19.6	--	21.8	--
Santa Maria	12/28	21	4.3	2.1	5.0	3.4
Silverton	12/27	27	7.1	2.8	8.5	4.8
Spud Mountain	12/27	46	15.4	9.4	19.2	15.0
Telluride	12/29	32	7.1	3.6	6.1	4.5
Tower	12/26	81	19.8	--	22.4	--
Trout Lake	12/29	38	9.8	5.8	9.1	7.6
Upper Rio Grande	12/29	39	7.3	4.7	9.8	5.4
Upper San Juan	12/29	73	20.9	10.0	20.7	19.4
Walton Mountain	12/27	59	13.4	--	12.9	--
Wolf Creek Pass	12/29	69	19.2	9.0	18.7	17.8
Wolf Creek Summit	12/29	80	23.4	13.2	23.3	17.7
Yampa View	1/02	39	9.1	--	7.4	8.8
Bateman, NM	1/02	32	7.1	5.0	--	7.0
Teakettle, NM	1/5	32	6.1	4.1	4.6	--

May 15, 1973

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Courses	Current Information			Water Content (Inches)			
				Averages			
	Date of Survey	Snow Depth Inches	Water Content Inches	May 1 1953-67	May 15 1953-67	May 15, 1972	May 1, 1973
Berthoud Summit	5/15	60	22.5	20.6	19.3	21.7	21.7
Cameron Pass	5/15	86	37.8	28.4	25.6	31.5	36.9
Cascade	5/15	17	7.4	3.6	--	--	17.5
Columbine Lodge	5/14	31	14.5	21.4	12.5	12.0	21.0
Cumbres Pass	5/15	42	22.4	12.6	--	--	29.8
Cumbres Trestle	5/15	53	24.6	--	--	--	--
Deadman Hill	5/16	49	18.4	17.1	--	--	20.9
Fish Creek	5/10	99	44.4	--	--	--	44.8
Fremont Pass	5/14	52	17.7	17.9	15.5	20.6	17.4
Hiway	5/14	84	35.6	28.1	--	--	35.5
Ironton Park	5/14	27	10.5	--	--	--	17.3
Joe Wright	5/15	78	32.0	--	--	--	31.8
Lemon #1	5/14	6	2.5	--	--	--	12.1
Lemon #2	5/14	19	8.0	--	--	--	15.5
Lizzard Head	5/14	42	21.6	12.9	--	--	22.8
Lost Lake	5/15	27	10.1	8.9	--	--	12.2
Love Lake	5/15	18	6.6	--	--	--	13.3
Mesa Lakes	5/11	57	23.3	15.1	8.8	1.6	28.9
Milner	5/14	40	10.6	12.0	7.5	7.4	11.9
Mineral Creek	5/15	41	16.6	10.5	--	--	21.5
Molas Lake	5/15	22	8.2	6.8	--	--	14.9
Monarch	5/14	50	18.8	16.5	--	--	20.6
Park View	5/15	21	7.8	5.6	2.1	0.8	11.2
Pass Creek	5/14	11	4.7	3.9	--	--	13.2
Pool Table	5/15	5	1.5	1.9	--	--	7.9
Porphyry	5/14	56	20.6	16.5	13.4	11.2	22.5
Purgatory	5/18	56	24.6	--	--	--	33.1
Rabbit Ears	5/14	67	28.1	25.9	--	--	30.9
Red Feather	5/16	16	6.3	4.4	--	--	13.9
Red Mountain	5/15	89	40.5	25.4	30.3	26.1	39.6
Rico	5/14	0	0.0	0.4	--	--	9.4
Santa Maria	5/15	0	0.0	0.5	--	--	4.4

Snow Courses	Current Information			Water Content (Inches)			
	Date of Survey	Snow Depth Inches	Water Content Inches	Averages May 1 1953-67	Averages May 15 1953-67	May 15, 1972	May 1, 1973
Silverton	5/15	0	0.0	0.1	--	--	10.5
Spud Mountain	5/15	69	32.5	22.2	18.9	8.6	35.8
Telluride	5/14	0	0.0	0.8	--	--	9.9
Tennessee Pass	5/14	22	8.2	7.7	2.4	1.6	7.1
Tower	5/10	122	53.2	--	--	--	49.7
Trout Lake	5/14	37	15.2	8.5	--	--	19.2
Two Mile	5/15	57	18.6	17.0	16.4	21.0	15.7
University Camp	5/14	59	21.7	20.7	18.4	13.0	20.9
Upper Rio Grande	5/15	8	3.2	1.8	--	--	12.7
Upper San Juan	5/14	83	40.0	26.6	18.6	0.0	42.2
Vail Pass	5/14	39	13.4	15.0	10.2	10.6	16.8
Willow Creek Pass	5/15	28	12.3	10.0	5.4	4.3	13.7
Wolf Creek Pass	5/14	69	32.6	22.0	14.5	0.0	36.9
Wolf Creek Summit	5/14	106	45.0	30.0	31.4	23.3	44.9
Yampa View	5/14	16	7.8	8.4	--	--	18.4
NEW MEXICO							
Hopewell	5/15	31	12.7	--	--	--	21.7
Rio En Medio	5/15	22	9.3	--	--	--	17.5
Sandoval	5/15	7	2.2	--	--	--	10.9

The snowpack declined over most of the state as is usual during May. A few of the very high elevation snow courses increased slightly. Cool temperatures have retarded melt. In many cases these temperatures may have prevented flooding. Low snows were able to melt and run off before major melting took place at higher elevations.

There is a small possibility of a major snowmelt flood in the northern half of the state. Only heavy precipitation would increase the flows to dangerous levels if normal diversions are started.

The southern portion of the state, particularly the southwestern corner and the Rio Grande Valley, could still be subjected to high flows through May and the first part of June. This is true particularly if precipitation or temperatures are above normal.

June 1, 1973

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Courses	Current Information			Water Content (Inches)			
				Averages			
	Date of Survey	Snow Depth Inches	Water Content Inches	June 1 1953-67	May 15 1953-67	June 1, 1972	May 15, 1973
rthoud Summit	5/30	50	18.2	11.5	19.3	11.8	22.5
meron Pass	5/31	74	33.7	18.2	25.6	18.5	37.8
lumbine Lodge	6/01	0	0.0	3.0	12.5	0.0	14.5
mbres Pass	5/30	14	7.0	--	--	--	22.4
mbres Trestle	5/30	21	10.5	--	--	--	24.6
emont Pass	5/30	41	15.0	7.7	15.5	11.2	17.7
way	5/30	69	32.8	--	--	7.7	35.6
e Wright	5/31	67	29.4	--	--	14.9	32.0
sa Lakes	5/29	22	8.6	0.7	8.8	0.0	23.3
lner	5/30	12	3.0	--	7.5	0.0	10.6
narch	5/31	28	12.3	--	--	--	18.8
rk View	5/31	0	0.0	0.1	2.1	0.0	7.8
ss Creek	5/30	0	0.0	--	--	0.0	4.7
rphyry	5/31	36	15.4	6.6	13.4	0.0	20.6
obit Ears	6/01	36	15.1	--	--	--	28.1
d Mountain	5/31	69	34.0	9.3	30.3	4.5	40.5
ud Mountain	5/31	53	26.1	10.6	18.9	4.2	32.5
lluride	5/31	0	0.0	--	--	0.0	0.0
nnessee Pass	5/30	0	0.0	0.0	2.4	0.0	8.2
o Mile	5/31	53	14.6	12.7	15.4	17.7	18.6
iversity Camp	5/31	45	15.1	10.7	18.4	8.4	21.7
per San Juan	5/30	44	23.5	5.2	18.6	0.0	40.0
il Pass	5/30	11	4.3	3.3	10.2	2.7	13.4
llow Creek Pass	5/30	5	1.7	0.9	5.4	0.0	12.3
lf Creek Pass	5/30	31	16.6	5.5	14.5	0.0	32.6
lf Creek Summit	5/30	87	41.2	23.7	31.4	14.1	45.0

he remaining snowpack is all at high elevations and all well above normal. he only area that could still have high water from snowmelt is the southwest orner. The snow line is about 9400 feet on the north slopes and could cause ome damage if the area was subjected to heavy rains or prolonged high emperatures.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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EARLY SEASON SNOW REPORT FOR COLORADO

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January 1, 1974

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Course	Current Information			Past Record Water Content in Inches		
	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Berthoud Summit	12/28	36	7.7	7.8	8.5	11.4
Cameron Pass	12/19	36	11.0	---	---	16.5
Columbine Lodge	12/27	40	8.7	8.6	9.6	14.3
Fremont Pass	12/27	25	4.2	6.0	6.9	9.8
Joe Wright	12/19	35	9.8	---	12.0	---
Mesa Lakes	12/28	23	3.8	7.4	8.0	10.5
Porphyry Creek	12/28	36	6.0	7.1	10.9	10.0
Rabbit Ears	12/27	45	9.5	11.9	14.2	16.1
Red Mountain	1/02	49	11.5	13.6	20.7	19.0
Spud Mountain	1/02	37	6.9	10.5	15.4	15.2
Tennessee Pass	12/27	15	1.9	4.3	5.6	6.5
Two Mile	12/30	34	6.3	6.3	8.4	8.6
University Camp	12/29	42	8.5	6.8	7.3	10.9
Upper San Juan	12/28	33	7.6	14.2	20.9	19.1
Vail Pass	12/27	29	5.3	6.4	8.1	10.4
Wolf Creek Pass	12/28	28	6.4	13.5	19.2	17.4
Wolf Creek Summit	12/28	30	7.2	14.5	23.4	18.5

Only a limited number of snow courses are read as of January 1st. These only indicate trends. February 1st measurement schedule will provide extended coverage.

These measurements indicate the Front Range has near normal snow cover. The upper and middle Colorado River Drainage has just slightly below normal cover.

Grand Mesa snow is only about half of the 15-year normal.

The other area that is considerably below normal is the San Juan Drainage.

This is very early in the snow season and many changes can take place, however, carry-over storage is good and soil moisture conditions about average.

Spring flow prospects are at least normal.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
FEB. 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Cente Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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Report prepared by

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SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of
February 1, 1974

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
FEBRUARY 1, 1974

SNOWFALL STARTED LATE IN BOTH STATES BUT DECEMBER AND SUBSEQUENT STORMS HAVE STARTED AN EXCELLENT SNOWPACK. PRACTICALLY ALL BASINS IN BOTH STATES HAVE ABOVE AVERAGE SNOWFALL. NEW AVERAGES WERE COMPUTED THIS YEAR. THE NEW NORMALS ARE BASED ON THE 1958-72 PERIOD. THIS BRINGS ALL HYDROLOGIC DATA INTO CURRENT PERIODS. MOUNTAIN SOILS CONTAIN NEAR NORMAL SOIL MOISTURE.

COLORADO

A MAJOR STORM NETWORK STARTED LATE IN DECEMBER AND HAS PRODUCED ABOVE AVERAGE SNOWPACK. THE CENTRAL NORTHERN SECTION OF COLORADO HA THE HIGHEST SNOW WITH UP TO 150 PERCENT OF NORMAL. THE COLORADO BASIN HAS 124 PERCENT, RIO GRANDE 137 PERCENT, THE ANIMAS 100 PERCENT, AND THE SOUTH PLATTE 117 PERCENT. IF SNOWFALL REMAINS AT LEAST NORMAL FOR THE REMAINDER OF THE YEAR, WATER SUPPLIES SHOULD BE EXCELLENT. CARRY-OVER STORAGE IN THE STATE'S MANY RESERVOIRS IS GOOD.

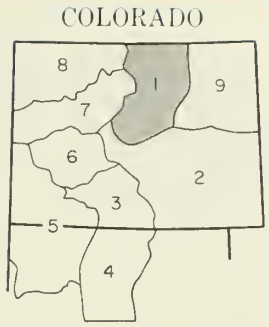
NEW MEXICO

ALL SNOW DRAINAGES IN NEW MEXICO ARE REPORTING ABOVE AVERAGE SNOWFALL. A SERIES OF STORMS SWEPT THROUGH THE LOWER PORTION OF THE UNITED STATES DEPOSITING A LARGE AMOUNT OF SNOW IN ITS PATH. EVEN THE LOW ELEVATION AREAS HAVE A LOT OF SNOW ON THE GROUND. IN THE WAKE OF LAST YEAR'S RECORD SNOWPACK, THIS COULD BE AN EXCELLENT WATER YEAR. MAINSTEM OF RIO GRANDE HAS SLIGHTLY LESS SNOW THAN LAST YEAR, BUT STILL IS CONSIDERABLY ABOVE THE 1958-72 AVERAGE. RESERVOIR STORAGE IS EXCELLENT.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

THE SNOWPACK ON THE UPPER SOUTH PLATTE DRAINAGE IS ABOVE NORMAL EXCEPT ON THE ST. VRAIN AND HEADWATERS OF THE MAINSTEM. SNOW IN THESE TWO AREAS IS BELOW NORMAL. CARRY-OVER STORAGE IS 112 PERCENT OF NORMAL AND WILL PROVIDE GOOD SUPPLEMENTAL SUPPLIES. VALLEY SOILS ARE IN GOOD CONDITION. MOUNTAIN SOILS ARE ABOUT NORMAL.

This report prepared by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
Deer Creek	Avg.	Avg.
North Fork of South Platte	Avg.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Avg.	Avg.
Rock Creek	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	116	123
Boulder	3	123	117
Cache La Poudre	9	116	132
Clear Creek	6	120	116
Saint Vrain	2	71	102
South Platte	7	82	89

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	82	74
Boulder	1	100	82
Cache La Poudre	2	110	100
Clear Creek	2	96	98
Saint Vrain	2	95	70
South Platte	2	100	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	13.8
Barr Lake	32.2	24.1	27.4	20.9
Black Hollow	8.0	4.5	4.3	3.8
Boyd Lake	44.0	45.8	37.5	37.2
Cache La Poudre	9.5	7.2	7.8	7.6
Carter Lake	108.9	82.9	83.7	77.3
Chambers Lake	8.8	3.1	3.8	2.9
Cheeseman	79.0	52.5	43.4	56.1
Cobb Lake	34.3	19.2	20.9	15.1
Eleven Mile	97.8	97.8	93.0	87.2
Fossil Creek	11.6	7.4	8.8	6.8
Gross	43.1	28.6	23.6	28.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	5.8	4.5	3.3
Horsetooth	143.5	106.6	84.5	85.5
Lake Loveland	14.3	10.1	9.4	8.8
Lone Tree	9.2	8.3	8.2	6.4
Mariano	5.4	5.0	5.2	4.8
Marshall	10.3	---	3.0	3.7
Marston	18.0	15.9	14.8	14.4
Milton	24.4	15.0	13.3	12.6
Standley	18.5	---	18.1	15.2
Terry Lake	42.0	5.1	5.8	4.7
Union	12.7	12.7	10.8	9.9
Windsor	18.6	10.2	12.0	10.1

† 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

FEBRUARY 1 SNOWPACK IN THE ARKANSAS BASIN IS ABOVE THE 1958-72 AVERAGE RANGING FROM 111 PERCENT ON THE PURGATOIRE TO 205 PERCENT ON THE CUCHARAS. THE MAINSTEM IS 127 PERCENT OF AVERAGE. STREAMFLOW FOR THE SUMMER SEASON SHOULD BE AVERAGE IF AVERAGE SNOWFALL CONTINUES DURING FEBRUARY, MARCH, APRIL AND MAY. SOIL MOISTURE IN THE MOUNTAIN SOILS VARY FROM 7.5 TO 113 PERCENT. RESERVOIR STORAGE IN ALL RESERVOIRS EXCEPT TURQUOISE IS 155 PERCENT OF LAST YEAR BUT ONLY 53 PERCENT OF THE 1958-72 AVERAGE. TURQUOISE CONTAINS 130,000 ACRE FEET COMPARED TO 68,600 LAST YEAR.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape Creek	Avg.	Fair
Hardscrabble Creek	Avg.	Fair
Huerfano	Avg.	Fair
Monument Creek	Avg.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	11	111	127
Cucharas	3	134	205
Purgatoire	1	53	111

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	101	113
Cucharas and Purgatoire	2	79	75

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe Creek	61.6	0.0	0.0	17.0
Clear Creek	11.4	4.0	5.2	8.1
Cucharas	40.0	5.4	0.0	2.8
Great Plains	150.0	26.1	13.5	49.3
Horse Creek	26.9	0.0	0.0	6.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	14.0	11.9	85.0
Meredith	41.9	19.5	14.6	9.5
Model	15.0	0.4	0.0	3.0
Turquoise	130.0	68.6	48.3	---
Twin Lakes	57.9	40.0	25.0	25.6

+ 1958-1972 period.

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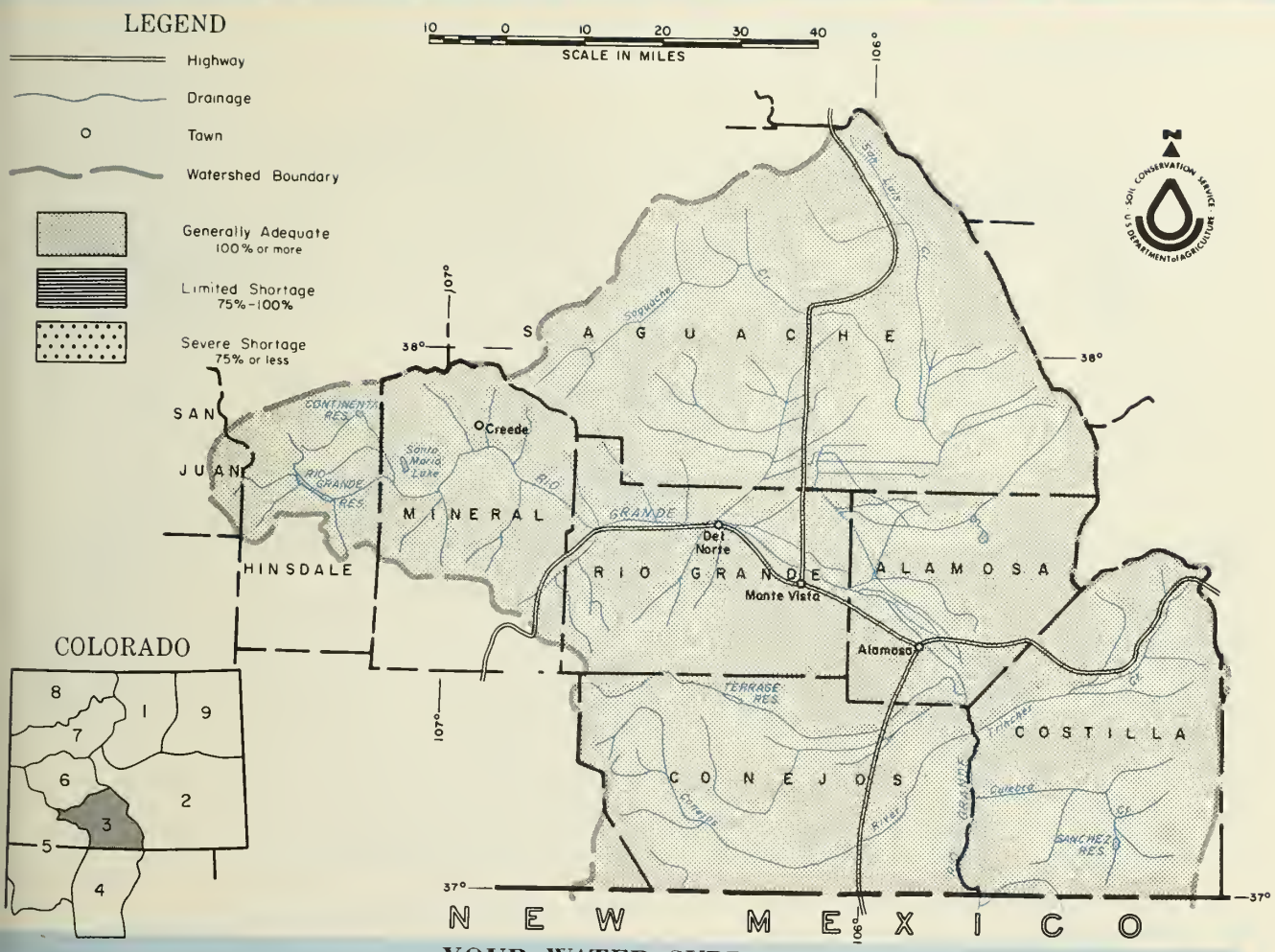
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWPACK ON THE RIO GRANDE IS AGAIN ABOVE NORMAL. IT IS NOT AS HIGH AS LAST YEAR, HOWEVER, SHOULD PROVIDE ADEQUATE WATER IF SNOW CONTINUES TO FALL. CARRY-OVER STORAGE IS NEARLY TWICE NORMAL AND 258 PERCENT OF LAST YEAR. VALLEY SOIL MOISTURE IS REPORTED AS FAIR. MOUNTAIN SOIL MOISTURE IS AVERAGE.

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ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Avg.
Sangre de Cristo Creek	Exc.	Avg.
Trinchera Creek	Exc.	Avg.

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	72	126
Conejos	3	92	116
Culebra	5	96	145
Rio Grande	11	69	99

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	102	89
Conejos	1	102	89
Culebra	1	93	84
Rio Grande	3	86	79

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	26.7	1.4	4.5	4.7
Platoro	60.0	35.4	2.9	8.6
Rio Grande	45.8	28.7	17.2	19.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103.2	19.5	5.0	13.3
Santa Maria	45.0	7.6	4.5	5.9
Terrace	17.7	8.8	5.1	5.3

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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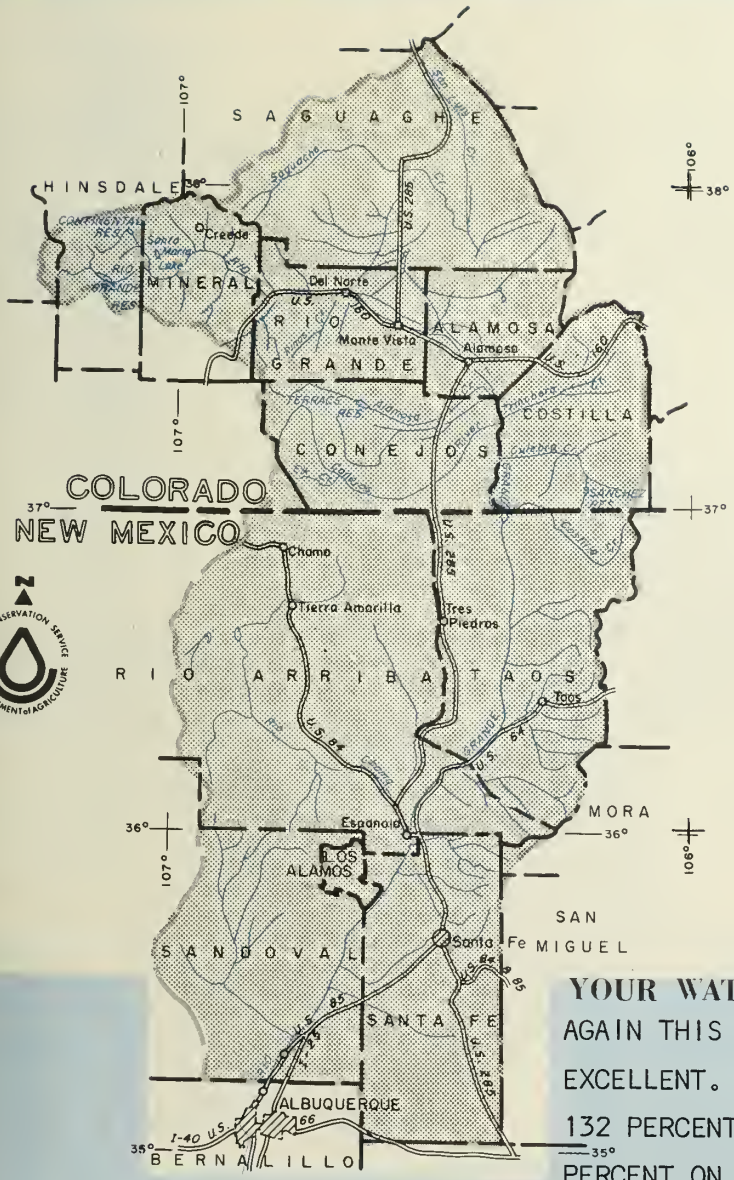

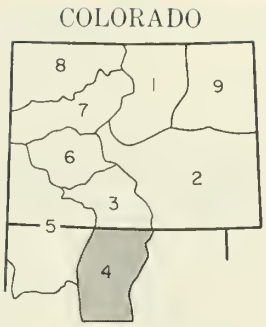

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

AGAIN THIS YEAR WATER SUPPLY PROSPECTS ARE EXCELLENT. CURRENT SNOWPACK RANGES FROM 132 PERCENT OF NORMAL ON RED RIVER TO 176 PERCENT ON PECOS. CARRY-OVER STORAGE FROM LAST YEAR'S RECORD SNOWPACK IS STILL GOOD. SOIL MOISTURE IS LISTED AS FAIR TO GOOD EXCEPT IN THE SOUTHERN PART WHERE SOILS ARE DRY.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo	Exc.	Exc.
Jemez River	Exc.	Exc.
Mora River	Exc.	Exc.
Nambe Creek	Exc.	Exc.
Rio Ojo Caliante	Exc.	Exc.
Rio Pueblo de Taos	Exc.	Exc.
Santa Fe Creek	Exc.	Exc.

The forecast of the Rio Grande at San Marcial is ___ % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	100	176
Rio Chama	4	101	144
Rio Grande, N.M.	11	93	137
Red River	2	81	132

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	100	86
Rio Chama	2	173	139
Rio Grande	4	80	106
Red River	1	94	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	95	85	80
Caballo	344	42	69	50
Conchas	273	178	141	185

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Elephant Butte	2195	864	334	442
El Vado	195	122	22	2
McMillan-Avalon	38	11	33	19

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
February 1, 1974

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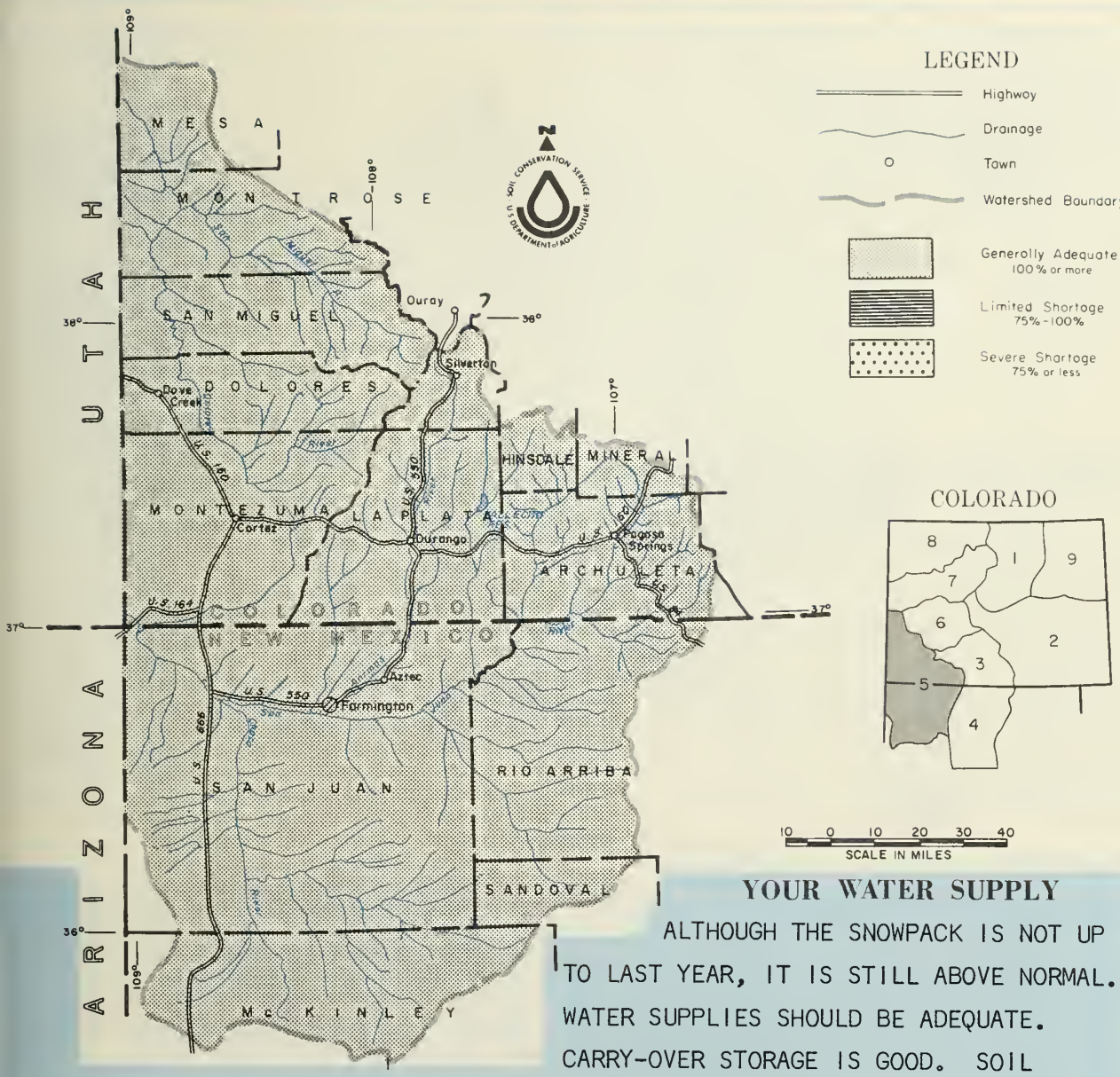

YOUR WATER SUPPLY

ALTHOUGH THE SNOWPACK IS NOT UP TO LAST YEAR, IT IS STILL ABOVE NORMAL. WATER SUPPLIES SHOULD BE ADEQUATE. CARRY-OVER STORAGE IS GOOD. SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED AS EXCELLENT. MOUNTAIN SOILS ARE NEAR NORMAL.

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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1974			

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Exc.	Avg.
Mancos	Exc.	Avg.
San Miguel	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	8	69	100
Dolores	5	99	138
San Juan	5	85	120

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	85	97
Dolores	3	85	97
San Juan	3	85	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	--	7	9
Jackson Gulch	10	--	10	4
Lemon	40	19	21	19
Navajo	1696	1041	946	577
Vallecito	126	70	74	53

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average

+ 1958-1972 period

Return if not delivered
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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE FEBRUARY 1 SNOWPACK IS ABOVE AVERAGE IN THE GUNNISON RIVER BASIN RANGING FROM 109 PERCENT ON SURFACE CREEK TO 132 PERCENT ON THE UNCOMPAHGRE. THIS SUMMER'S STREAMFLOW SHOULD BE AVERAGE OR ABOVE IF AVERAGE SNOWFALL CONTINUES DURING THE REMAINDER OF THE SEASON. RESERVOIR STORAGE IS EXCELLENT WITH BLUE MESA CONTAINING 468,000 ACRE FEET COMPARED TO 336,000 LAST YEAR, AND TAYLOR WITH 63,000 ACRE FEET COMPARED TO LAST YEAR'S 39,000. MORROW POINT IS THE SAME AS LAST YEAR'S.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BUROICK---STATE CONSERVATIONIST
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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
North Fork of Gunnison	Exc.	Avg.
Taylor	Exc.	Avg.

(1) Observed flow plus chunge in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	105	123
Surface Creek	3	88	109
Uncompahgre	3	100	132

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	118	130
Surface Creek	1	92	110
Uncompahgre	2	92	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	465	336	491
Morrow Point	121	115	116	100

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Silver Jack	14	5	5	--
Taylor	106	63	39	63

† 1958-1972 period.

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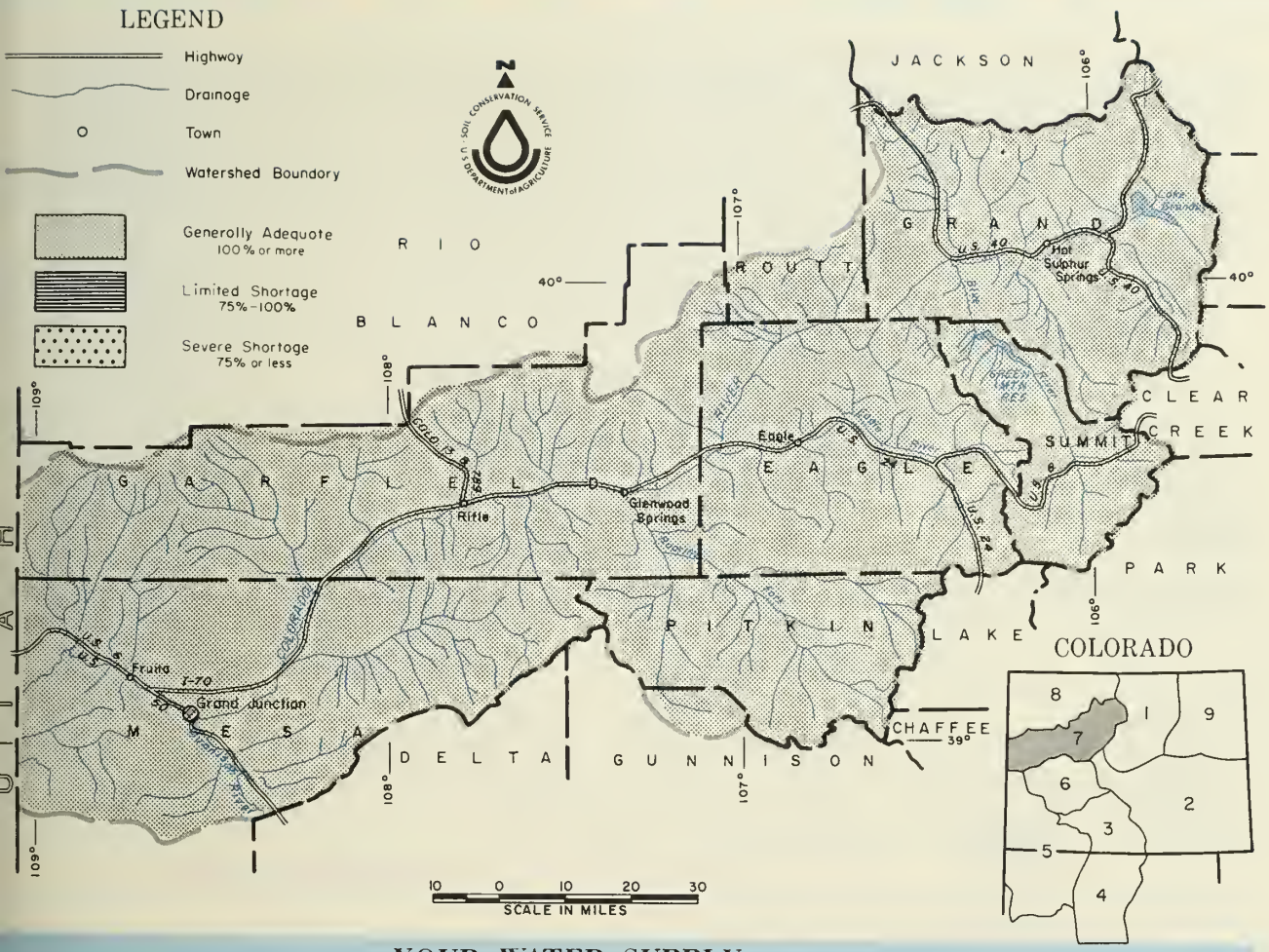
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FEBRUARY 1 SNOWPACK IN THE COLORADO RIVER BASIN IS EXCELLENT THIS YEAR RANGING FROM 108 PERCENT OF THE 1958-72 AVERAGE ON PLATEAU CREEK TO 147 PERCENT ON THE WILLIAMS FORK. MOST TRIBUTARIES HAVE BETTER SNOWPACK THAN LAST YEAR'S FEBRUARY 1 READING. STREAMFLOW FOR THIS SUMMER WILL BE ABOVE AVERAGE IF SNOWFALL IS AVERAGE FOR THE REMAINDER OF THE SEASON. RESERVOIR STORAGE IS EXCELLENT BEING 118 PERCENT OF LAST YEAR AND 138 PERCENT OF THE 1958-72 AVERAGE. MOUNTAIN SOIL MOISTURE CONDITIONS ARE NEAR NORMAL.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush Creek	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake G as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat T and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plu in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flou plus the changes as indicated in (3) and (

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	120	119
Colorado	20	119	124
Plateau	3	90	108
Roaring Fork	8	119	127
Williams Fork	3	121	147
Willow	2	150	138

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	103	118
Colorado	5	94	100
Roaring Fork	1	56	80
Willow	2	96	108

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	239	219	234
Granby	466	403	353	255
Green Mountain	147	84	87	77
Homestake	43	31	21	20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average
Ruedi	101	70	70	70
Williams Fork	97	51	61	34
Willow Creek	9	7	7	6
Vega	32	13	13	10

+ 1958-1972 peri

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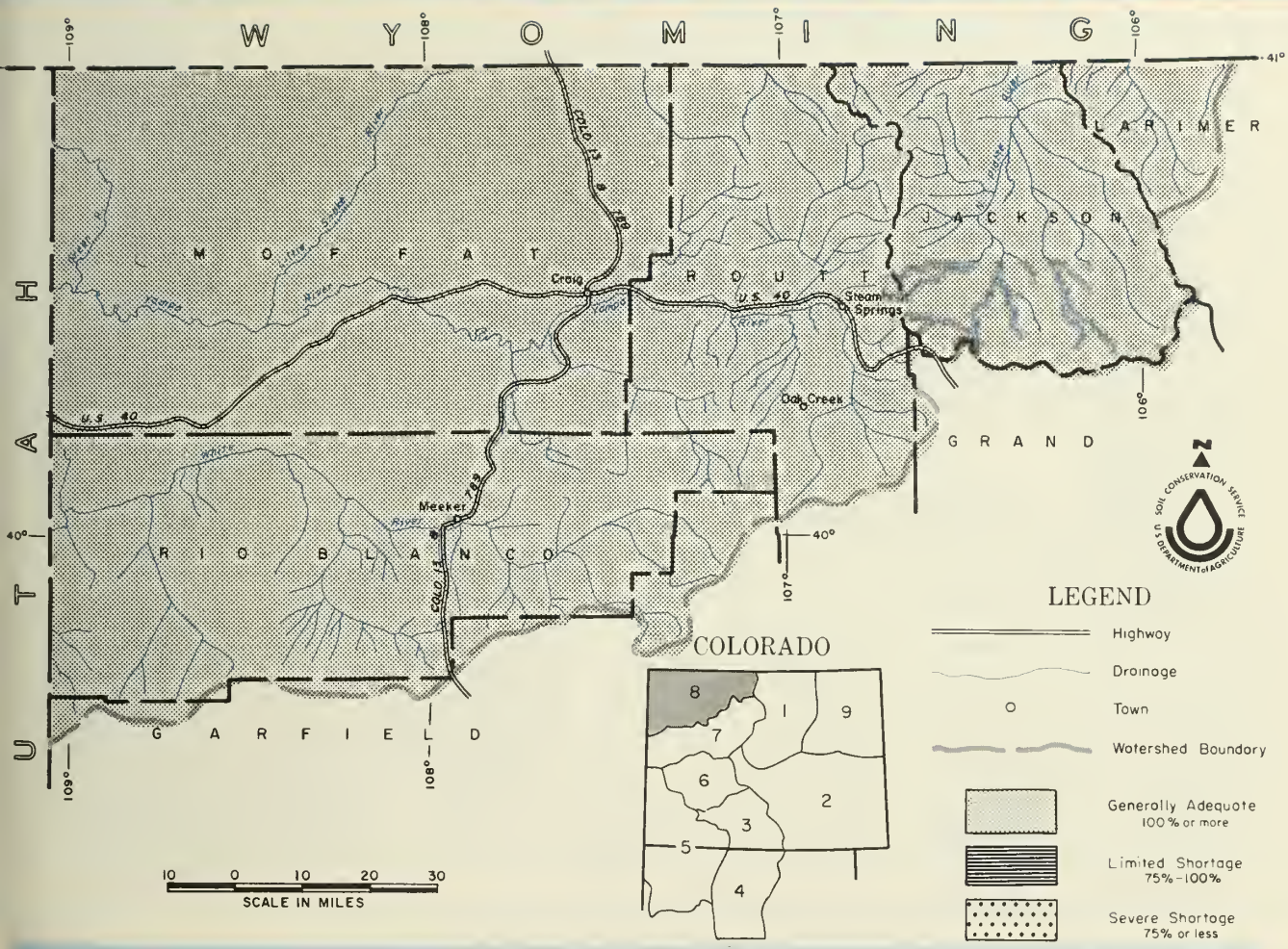
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE FEBRUARY 1 SNOWPACK IS MUCH ABOVE THE 1958-72 AVERAGE IN ALL THE BASINS RANGING FROM 110 PERCENT ON THE WHITE RIVER TO 145 PERCENT ON THE LARAMIE RIVER. SNOWPACK IS ABOVE LAST YEAR'S ON ALL BASINS EXCEPT ON THE WHITE RIVER WHICH IS THE SAME. WITH AVERAGE SNOWFALL THE REMAINDER OF THE SEASON, STREAMFLOW SHOULD BE ABOVE AVERAGE. SOIL MOISTURE CONDITIONS IN THE MOUNTAINS ARE ABOVE AVERAGE. SOIL MOISTURE IN THE VALLEY IN REPORTED AS GOOD.

This report prepared by

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GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average †
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Fair
Hunt Creek	Exc.	Fair
Illinois River	Exc.	Fair
Michigan River	Exc.	Fair
Oak Creek	Exc.	Fair
Trout Creek	Exc.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average †
Elk	2	141	125
Laramie	2	132	145
North Platte	5	117	132
White	2	100	110
Yampa	5	125	119

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average †
Laramie	2	110	100
North Platte	2	96	108
Yampa	1	71	102

† 1958-1972 period

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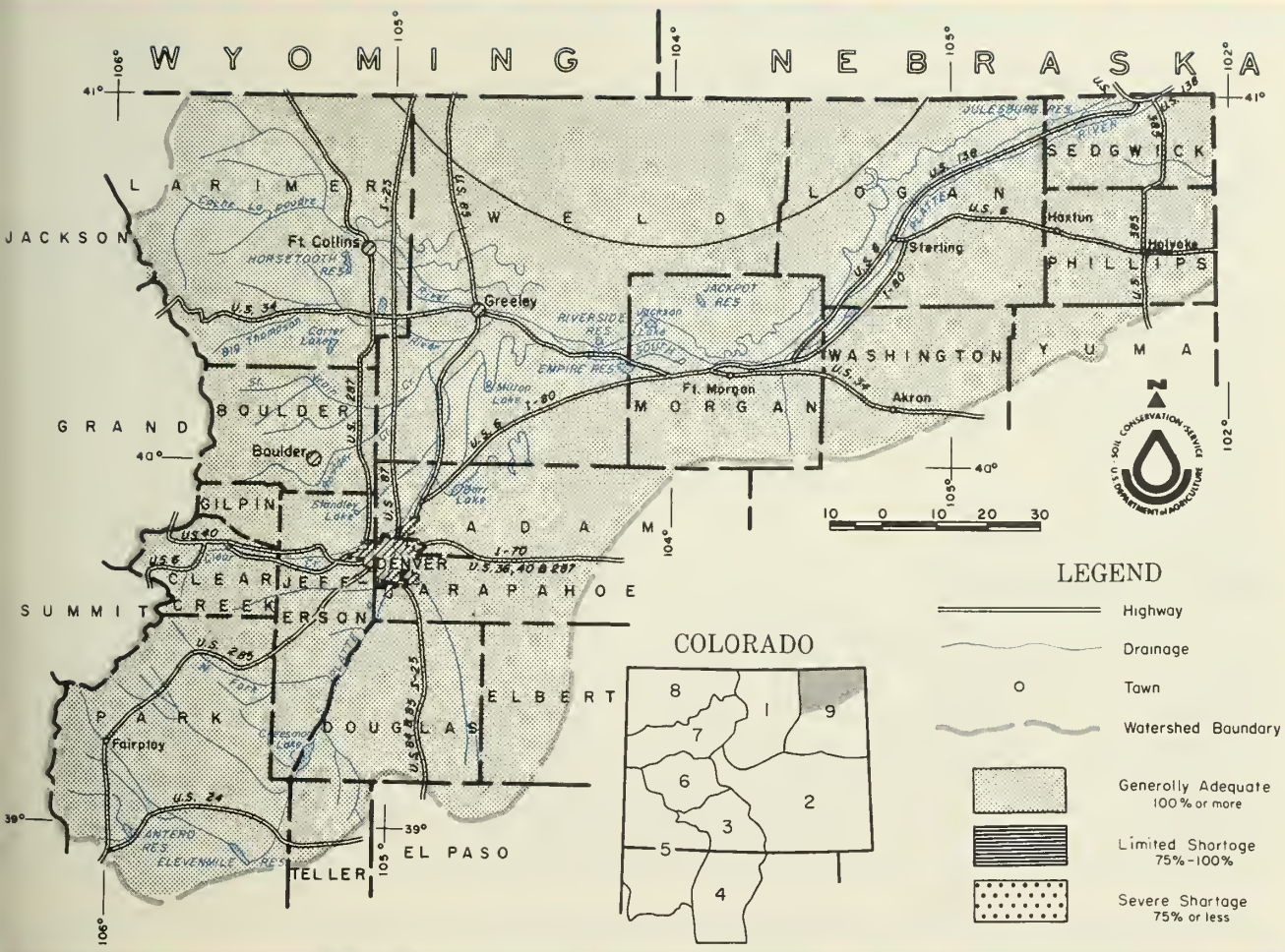
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

February 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK ON THE UPPER PLATTE AND TRIBUTARIES IS ABOVE NORMAL EXCEPT IN THE SOUTHERN END. HERE SNOW IS SLIGHTLY DEFICIENT. THE BIGGEST SNOWPACK IS ON CLEAR CREEK AT 132 PERCENT OF NORMAL TO A LOW ON UPPER SOUTH PLATTE AT 89 PERCENT. CARRY-OVER STORAGE IS NEAR NORMAL. SOIL MOISTURE IS REPORTED AS GOOD IN THE IRRIGATED AREAS.

This report prepared by

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Issued by

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STERLING, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
No numerical forecasts issued until March 1, 1974			

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg.	Avg.
South Platte from Ft. Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	116	123
Boulder	3	123	117
Cache La Poudre	9	116	132
Clear Creek	6	120	116
Saint Vrain	2	71	102
South Platte	7	82	89

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	82	74
Boulder	1	100	82
Cache La Poudre	2	110	100
Clear Creek	2	96	98
Saint Vrain	2	95	70
South Platte	2	100	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	82.9	83.7	77.3
Cheeseman	79.0	52.5	43.4	56.1
Eleven Mile	97.8	97.8	93.0	87.2
Empire	37.7	5.3	25.1	26.5
Horsetooth	143.5	106.6	84.5	85.5

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	24.6	29.5	28.0
Julesburg	28.2	19.8	19.8	20.1
Point of Rocks	70.0	69.8	63.4	53.4
Prewitt	32.8	22.0	15.5	15.9
Riverside	57.5	29.4	49.1	44.6

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	1/29	46	13.5	9.2	10.4
McIntyre	NS	--	---	---	---
Roach	1/27	58	17.0	14.0	10.6
North Platte River					
Cameron Pass	1/30	57	20.5	20.7	16.5
Columbine Lodge	1/30	69	19.7	13.1	14.3
Northgate	1/30	23	6.1	5.8	3.8
Park View	1/28	30	7.2	6.9	5.8
Willow Cr. Pass (B)	1/28	36	10.0	7.7	7.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	1/29	21	5.0	6.0	5.1
Boulder Falls	1/29	33	9.5	7.1	7.1
University Camp	1/29	43	12.5	8.8	10.9
Big Thompson River					
Deer Ridge	1/29	18	4.3	4.3	2.9
Hidden Valley	1/31	31	7.4	6.9	6.4
Lake Irene	1/27	55	15.4	13.3	13.8
Long's Peak	1/30	31	8.3	6.4	6.0
Two Mile	1/29	41	11.1	9.4	8.6
Cache La Poudre					
Bennett Creek	1/30	31	8.6	5.7	5.0
Big South	1/31	2	0.5	1.8	1.4
Cameron Pass	1/30	57	20.5	20.7	16.5
Chambers Lake	1/31	24	8.8	7.6	5.6
Deadman Hill	1/29	46	13.5	9.2	10.4
Hour Glass Lake	1/30	28	7.8	---	3.7
Joe Wright	1/30	56	18.0	16.6	16.1
Lost Lake	1/31	35	10.4	8.6	7.7
Pine Creek	1/29	15	3.0	2.8	1.3
Red Feather	1/29	25	6.6	4.6	4.0
Clear Creek					
Baltimore (B)	1/29	21	5.0	6.0	5.1
Berthoud Falls	1/29	41	11.0	9.2	8.3
Empire	1/29	22	6.0	4.0	4.5
Grizzly Peak (B)	1/30	48	13.5	9.1	10.6
Loveland Lift	1/31	39	10.5	10.0	12.2
Loveland Pass	1/31	41	11.8	9.9	9.0
Saint Vrain River					
Copeland Lake	1/30	14	3.4	3.5	2.8
Ward	1/29	16	3.1	5.6	3.6
Wild Basin	NS	--	---	---	7.2
South Platte River					
Como	2/01	15	3.1	5.7	4.8
Geneva Park	1/28	14	2.3	3.5	2.6
Hoosier Pass	2/01	32	8.6	8.1	8.0
Horseshoe Mt.	2/01	26	6.4	6.5	6.8
Jefferson Creek	2/01	21	4.7	6.3	5.9
Mosquito	2/01	23	5.2	6.3	6.8
Trout Creek Pass	2/01	21	4.0	5.2	3.5
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	1/29	34	8.1	4.7	4.1
Cooper Hill (B)	1/30	33	9.0	6.4	6.9
East Fork	1/29	27	6.8	5.7	6.0
Four Mile Park	1/29	20	3.5	3.9	3.9
Fremont Pass	1/29	42	11.0	9.6	9.8
Garfield	1/30	36	10.8	11.0	8.5
Hermit Lake	1/28	33	9.0	9.8	5.8
Monarch Pass	1/30	45	12.9	11.8	10.3
Tennessee Pass	1/30	27	5.9	6.9	6.5
Twin Lakes Tunnel	1/24	30	7.9	6.1	6.0
Westcliffe	1/28	30	7.4	7.2	5.1

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG 58-72
Cucharas River					
Blue Lakes	1/28	20	6.2	4.1	2.3
Cucharas Pass	1/28	34	9.3	7.3	4.5
LaVeta Pass (B)	1/28	37	9.9	7.5	5.6
Purgatorie River					
Bourbon	1/29	25	4.9	9.3	4.4
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	1/28	25	4.5	8.6	3.5
Summitville	1/31	51	14.9	18.5	11.9
Conejos River					
Cumbres	1/30	56	17.2	15.1	13.1
LaManga	1/30	54	15.8	16.7	---
Platoro	1/30	45	12.0	16.3	12.5
River Springs	1/25	20	5.6	6.6	4.3
Culebra River					
Brown Cabin	1/28	29	7.1	6.7	4.3
Cottonwood (B)	1/28	25	5.4	6.2	3.9
Culebra	1/25	25	6.3	9.3	5.6
LaVeta Pass	1/28	37	9.9	7.5	5.6
Trinchera (B)	1/29	28	8.2	8.8	6.0
Rio Grande					
Cochetopa Pass	1/28	21	3.9	6.0	3.6
Grayback	1/31	40	11.5	16.0	---
Hiway	1/30	55	16.2	22.4	15.6
Lake Humphrey	1/30	20	3.7	7.3	4.8
Love Lake	1/29	23	4.4	10.0	4.9
Pass Creek	1/30	34	10.0	13.9	8.2
Pool Table	1/29	18	2.8	4.4	5.2
Porcupine	1/29	25	5.3	8.3	8.1
Santa Maria	1/28	18	3.9	4.7	3.3
Upper Rio Grande	1/29	21	4.7	9.3	5.8
Wolf Creek Pass	1/30	63	19.8	23.8	17.4
Wolf Cr. Sum. (B)	1/30	68	20.2	27.6	18.5
RIO GRANDE BASIN-N.M.					
Pecos River					
Panchuela	1/30	17	4.4	4.4	2.5
Rio Chama					
Bateman	1/31	34	8.2	9.0	6.4
Capulin Peak	1/30	22	4.9	5.7	3.5
Chama Divide	1/31	20	4.7	3.9	2.9
Chamita	2/01	32	8.6	7.5	5.5
Rio Grande					
Aspen Grove	NS	--	---	---	4.0
Big Tesuque	1/28	25	6.8	7.0	4.0
Blue Bird Mesa	1/29	16	3.4	4.2	3.5
Cordova	NS	--	---	---	6.2
Elk Cabin	1/28	16	5.6	4.3	2.7
La Cueva	1/29	23	5.2	6.6	---
Hopewell	1/29	50	14.0	11.8	---
Pajarito Peak	1/30	6	1.2	1.8	1.1
Payrole	1/29	28	7.4	7.6	6.1
Quemazon	1/31	26	6.4	7.6	6.1
Rio En Medio	1/28	32	9.0	9.2	6.0
Sandoval	1/31	14	3.5	4.4	3.5
Taos Canyon	1/29	23	5.8	5.2	2.7
Teakettle	1/29	29	6.8	7.9	5.1
Tres Ritos	1/31	21	4.6	6.0	3.3
Rio Hondo					
Twinning	1/31	16	3.1	7.1	7.1
Red River					
Hematite Park	1/28	16	4.0	5.4	2.9
Red River	1/28	18	4.7	5.3	3.7

NOTE: NS - No Survey
(B) - On Adjacent drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of February 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	1/29	39	9.6	12.7	8.0
Lemon	1/30	30	7.1	10.2	6.0
Mineral Creek	1/29	36	8.7	14.1	9.9
Molas Lake	1/29	38	10.5	10.6	8.7
Purgatory	1/29	47	12.4	20.6	15.4
Red Mountain Pass	1/29	65	18.8	27.8	19.0
Silverton Sub-Sta.	1/29	27	6.9	9.2	5.6
Spud Mountain	1/29	53	14.0	22.8	15.2
Dolores River					
Lizard Head	1/30	48	13.9	14.3	10.4
Lone Cone	1/31	48	13.9	12.7	11.8
Rico	1/30	33	8.5	9.9	5.6
Telluride	1/30	35	7.8	7.6	4.7
Trout Lake	1/30	44	11.9	12.0	8.1
San Juan River					
Chama Divide (B)	1/31	20	4.7	3.9	2.9
Chamita (B)	2/01	32	8.6	7.5	5.5
Upper San Juan	1/30	74	22.9	26.5	19.1
Wolf Cr. Pass (B)	1/30	63	19.8	23.8	17.4
Wolf Cr. Summit	1/30	68	20.2	27.6	18.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	1/30	53	14.1	16.6	12.7
Blue Mesa	NS			---	---
Butte	1/30	43	11.7	7.7	11.0
Cochetopa Pass (B)	1/28	21	3.9	6.0	3.6
Crested Butte	1/29	48	13.3	8.4	7.4
Keystone	1/29	60	16.7	14.9	13.1
Lake City	1/25	26	6.3	6.3	5.5
Mesa Lakes (B)	1/30	44	11.0	13.0	10.5
McClure Pass	1/29	51	13.3	13.5	11.1
Park Cone	1/30	34	8.3	5.8	6.1
Park Reservoir	1/29	62	16.2	17.1	14.6
Porphyry Creek	1/30	47	13.6	13.2	10.0
Tomichi	1/30	41	11.9	11.3	8.1
Surface Creek					
Alexander Lake	1/30	53	14.1	16.6	12.7
Mesa Lakes (B)	1/30	44	11.0	13.0	10.5
Park Reservoir	1/29	62	16.2	17.1	14.6
Uncompahgre River					
Ironton Park	1/29	50	15.1	11.6	8.0
Red Mountain Pass	1/29	65	18.8	27.8	19.0
Telluride (B)	1/30	35	7.8	7.6	4.7
COLORADO BASIN					
Blue River					
Blue River	2/01	26	6.3	6.0	5.2
Fremont Pass	1/29	42	11.0	9.6	9.8
Frisco	1/30	22	4.9	4.4	4.4
Grizzly Peak	1/30	48	13.5	9.1	10.6
Hoosier Pass (B)	2/01	32	8.6	8.1	8.0
Shrine Pass	1/30	47	13.4	12.0	10.3
Snake River	1/30	28	6.2	4.5	5.2
Summit Ranch	1/29	25	6.0	4.6	5.0
Colorado River					
Arrow	1/29	42	11.2	8.7	7.5
Berthoud Pass	1/29	45	11.4	10.0	9.4
Berthoud Summit	1/29	52	14.3	11.3	11.4
Cooper Hill	1/30	33	9.0	6.4	6.9
Fiddler Gulch	NS	--	---	---	9.0
Glenmar Ranch	1/28	31	7.3	6.8	5.1
Gore Pass	1/29	31	7.4	7.4	6.2
Grand Lake	1/30	32	7.8	5.1	4.9
Lake Irene	1/27	55	15.4	13.3	13.8
Lapland	1/28	29	7.9	5.9	6.6
Lulu	NS	--	---	---	---
Lunx Pass	1/29	32	7.7	8.8	7.6
McKenzie Gulch	1/29	28	6.5	5.1	4.1
Middle Fork	1/28	34	9.3	6.8	5.7
Milner	1/29	37	10.0	7.8	10.0
North Inlet	1/27	29	7.0	5.5	5.1
Pando	1/29	26	6.2	6.3	6.0
Phantom Valley	1/29	29	7.0	6.9	6.5
Ranch Creek	1/29	34	8.2	6.8	5.6
Tennessee Pass (B)	1/30	27	5.9	6.9	6.5
Vail Pass	1/30	48	13.3	10.4	10.4
Vasquez	1/30	39	9.8	7.4	7.7
Roaring Fork River					
Aspen	1/28	44	12.8	11.4	10.0
Chapman	NS	--	---	9.6	9.9
Independence Pass	1/24	40	10.1	6.1	9.7
Ivanhoe	1/28	53	14.3	12.3	10.2
Kiln	1/28	42	10.0	8.3	8.3
Last Chance	NS	--	---	7.5	7.2
Lift	1/28	51	13.4	10.2	10.1
McClure Pass	1/29	51	13.3	13.5	11.1
Nast	1/28	28	6.8	5.4	4.3
North Lost Trail	1/29	48	12.8	11.6	10.0
Williams Fork River					
Glenmar Ranch	1/28	31	7.3	6.8	5.1
Jones Pass	1/28	41	12.0	10.0	8.7
Middle Fork	1/28	34	9.3	6.8	5.7
Willow Creek					
Granby	1/28	27	7.1	3.7	4.7
Willow Creek Pass	1/28	36	10.0	7.7	7.7
Plateau Creek					
Mesa Lakes	1/30	44	11.0	13.0	10.5
Park Reservoir	1/29	62	16.2	17.1	14.6
Trickle Divide	1/29	64	17.0	19.3	16.0
YAMPA BASIN					
Elk River					
Clark	NS	--	---	8.2	7.9
Elk River	1/30	56	14.7	10.6	11.4
Hahn's Peak	1/30	49	13.1	9.1	10.8
White River					
Burro Mountain	1/30	44	10.9	13.5	11.5
Rio Blanco	1/29	43	11.7	9.0	9.0
Yampa River					
Bear River	NS	--	---	---	---
Buffalo Pass	1/28	112	34.0	25.2	31.1
Columbine Lodge (B)	1/30	69	19.7	13.1	14.3
Dry Lake	NS	--	---	12.4	12.0
Lynx Pass (B)	1/29	32	7.7	8.8	7.6
Rabbit Ears	1/30	69	19.4	17.1	16.1
Yampa View	1/30	49	13.0	10.9	9.8

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/14/73	11.1	8.5	7.7	6.6
Willow Pass	11/20/73	9.5	6.1	7.5	6.9
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/19/73	6.9	3.1	3.1	3.8
Big Thompson River					
Beaver Dam	10/19/73	7.1	3.3	4.5	4.1
Guard Station	10/19/73	6.9	2.9	3.2	4.8
Two Mile	10/19/73	9.1	4.5	5.3	5.5
Clear Creek					
Clear Creek	11/26/73	9.5	7.1	7.1	6.8
Hoop Creek	10/18/73	4.9	2.4	2.8	2.9
Cache La Poudre River					
Feather	12/13/73	10.1	5.1	4.5	4.7
Laramie Road	10/17/73	12.4	7.4	6.9	7.8
South Platte River					
Hoosier Pass	9/27/73	7.8	5.5	5.5	4.9
Kenosha Pass	9/27/73	4.4	3.3	3.3	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/19/73	6.7	5.2	5.0	4.0
Leadville	10/18/73	7.8	4.1	4.0	4.1
Twin Lakes Tunnel	10/18/73	4.5	2.2	2.4	2.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/12/73	10.7	4.7	4.6	5.3
Rio Grande					
Bristol View	11/12/73	6.1	2.3	4.1	4.0
La Veta	10/29/73	11.9	6.4	6.9	7.6
RIO GRAND BASIN - NEW MEXICO					
Rio Chama					
Bateman	10/23/73	6.7	2.7	2.6	2.5
Chamita	10/23/73	8.0	4.4	1.5	2.6
Rio Grande					
Aqua Piedra	10/15/73	7.2	3.5	4.5	3.6
Big Tesuque	10/15/73	3.7	2.0	3.0	1.6
Rio En Medio	10/15/73	3.5	1.6	2.1	1.4
Taos Canyon	10/15/73	3.3	2.2	2.1	2.2
Red River					
Red River Summit	10/15/73	4.8	1.5	1.6	2.1

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of February 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	10/25/73	9.1	3.8	7.2	6.0
Mineral Creek	12/10/73	5.7	2.9	3.2	3.4
Molas Lake	10/25/73	9.4	7.1	5.8	4.8
Dolores River					
Dolores	11/15/73	19.6	2.0	11.4	7.7
Lizard Head	11/05/73	11.8	1.2	4.1	6.9
Rico	11/05/73	13.8	1.4	9.3	9.6
GUNNISON BASIN					
Gunnison River					
King	10/19/73	3.3	2.6	2.2	2.0
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	9/27/73	4.2	3.3	3.2	2.8
Colorado River					
Berthoud Pass	10/18/73	3.9	3.2	3.2	2.8
Gore	11/20/73	4.9	2.4	3.1	3.1
Grand Mesa	10/23/73	12.5	11.3	12.3	10.3
Ranch Creek	10/19/73	8.7	4.9	5.4	5.8
Vail	11/26/73	12.3	7.1	6.9	7.0
Roaring Fork River					
Placita	11/28/73	9.3	4.4	7.8	5.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/14/73	19.0	8.6	12.1	8.4

ALL PROFILES 4 FEET DEEP

USDA SCS PORTLAND OREG 1967 MT-L-1845

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
SNOW SURVEY UNIT
P.O. BOX 17107
DENVER, COLORADO 80217

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAR. 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek,and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

MARCH 1, 1974

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MARCH 1, 1974

SNOWFALL DURING FEBRUARY WAS BELOW NORMAL OVER BOTH STATES. MOST AREAS STILL HAVE ABOVE NORMAL SNOWPACKS. THE SOUTH PLATTE AND RIO GRANDE DRAINAGES IN COLORADO ARE THE MOST DEFICIENT. NONE OF THE AREAS ARE CRITICALLY LOW. RESERVOIR STORAGE IN BOTH STATES IS GOOD AND WILL PROVIDE EXCELLENT SUPPLEMENTAL SUPPLIES. SOILS IN THE IRRIGATED AREAS OF COLORADO ARE GOOD. POOR CONDITIONS EXIST IN SOUTHERN NEW MEXICO.

COLORADO

THE NORTHERN PORTION OF THE STATE STILL HAS AN EXCELLENT SNOWPA DESPITE THE DEFICIENT SNOWFALL DURING FEBRUARY. THE REST OF THE STAT HAS SLIGHTLY BELOW TO JUST ABOVE NORMAL SNOW AS OF MARCH 1st. NO AREA IS CRITICALLY SHORT. SEVERAL MONTHS OF SNOWFALL IN THE MOUNTAINS STILL REMAIN. THE BIG THOMPSON HAS EXCELLENT STORAGE AS DOES THE DENVER WATER SYSTEM. MOS OF THE REST OF THE STATE HAS AT LEAST NORMAL STORAGE. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD IN THE CENTRAL AND NORTHERN PORTIONS AND FAIR IN THE SOUTHERN PORTION OF THE STATE.

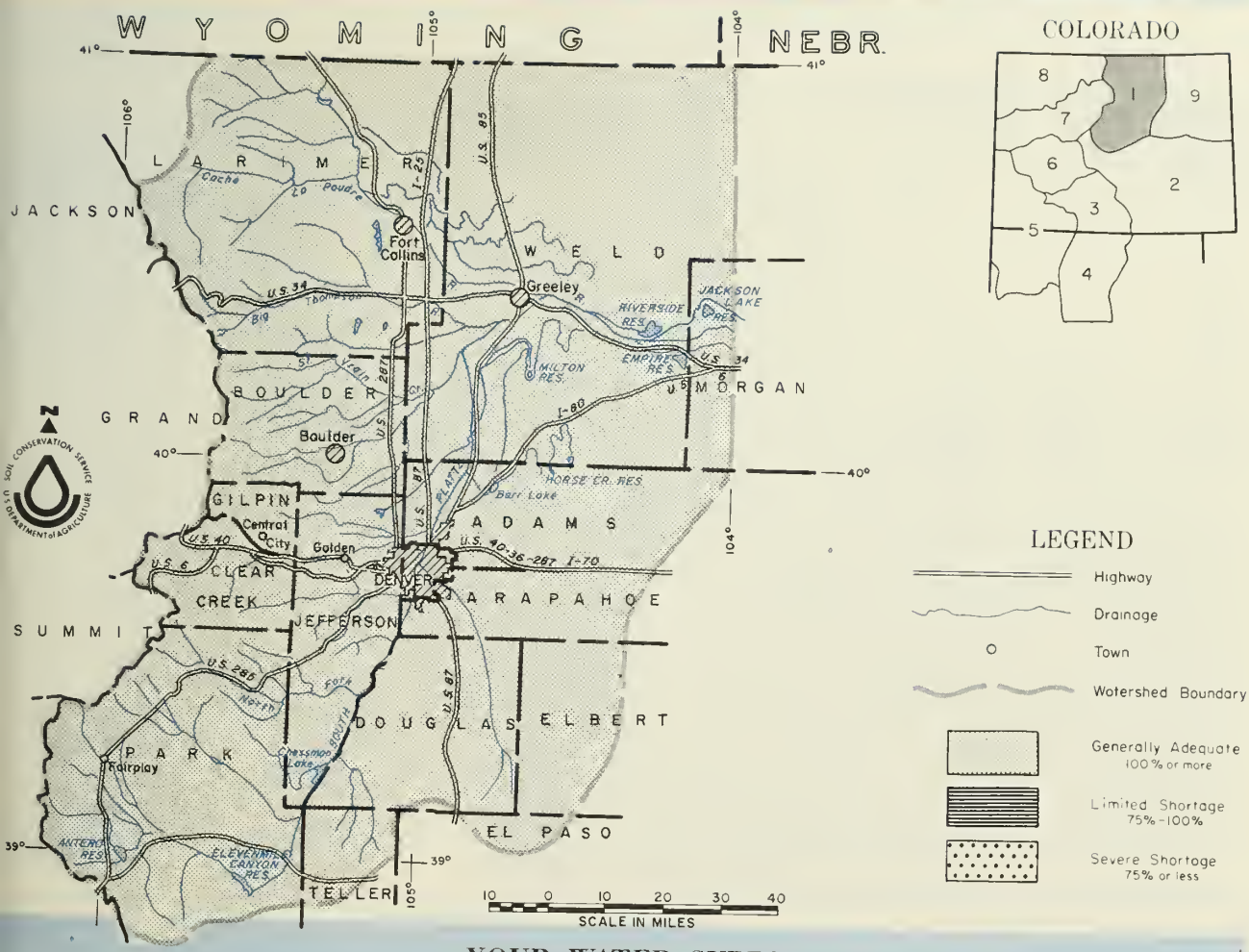
NEW MEXICO

THE SNOWPACK AT MOST OF THE HIGH ELEVATIONS IN NEW MEXICO IS STILL GOOD. THE OVERALL PACK IS 119% OF NORMAL ON THE RIO GRANDE, 132% ON THE CHAMA, AND 145% ON THE PECOS. IF THE REMAINING MONTHS PRODUCE AT LEAST NORMAL SNOW, WATER SUPPLIES SHOULD BE AT LEAST ADEQUATE THIS SUMME ELEPHANT BUTTE CONTAINS 879,000 ACRE FEET WHICH IS NEARLY TWICE NORMAL. AL OTHER RESERVOIRS HAVE GOOD CARRY-OVER. SOIL MOISTURE CONDITIONS ARE POOR.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

ALTHOUGH THE SNOWPACK FELL OFF SLIGHTLY DURING FEBRUARY, FORECASTS ARE STILL ABOVE NORMAL. MOST TRIBUTARY STREAMS OF THE SOUTH PLATTE SHOULD FLOW ABOUT 105% OF THE NEW 1958-72 AVERAGE. RESERVOIR STORAGE IS UP AND SHOULD PROVIDE AN EXCELLENT SUPPLEMENTAL SUPPLY. SOIL MOISTURE IS GOOD.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER COLORADO STERLING COLORADO LA JUNTA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr–Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake (1)	115	107	107
Boulder at Orodell	52	106	49
Cache La Poudre at Canyon Mouth (2)	260	105	247
Clear Cr. at Golden (3)	135	107	127
Saint Vrain at Lyons(4)	78	104	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by–pass to power plants. (2) Observed flow minus trans–basin diversions plus municipal and irrigation diversions. (3) Observed flow minu diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	5	120	107
Boulder	3	132	109
Cache La Poudre	8	119	117
Clear Creek	6	133	102
Saint Vrain	3	114	95
South Platte	3	91	82

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	82	74
Boulder	1	100	82
Cache La Poudre	2	110	100
Clear Creek	2	96	98
Saint Vrain	2	95	70
South Platte	2	100	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	13.9
Barr Lake	32.2	26.6	26.5	22.6
Black Hollow	8.0	4.6	4.4	3.8
Boyd Lake	44.0	44.0	37.5	36.5
Cache La Poudre	9.5	7.5	7.8	7.8
Carter Lake	108.9	91.3	95.1	87.1
Chambers Lake	8.8	3.7	4.4	3.3
Cheesman	79.0	50.4	41.4	56.7
Cobb Lake	34.0	19.3	21.0	15.1
Eleven Mile	97.8	97.8	90.9	87.0
Fossil Creek	11.6	7.4	8.8	7.3
Gross	43.1	29.3	24.0	28.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	6.4	5.1	4.4
Horsetooth	143.5	122.6	95.2	96.6
Lake Loveland	14.3	11.3	8.7	9.1
Lone Tree	9.2	8.3	8.5	6.5
Mariano	5.4	5.0	5.1	4.9
Marshall	10.3	7.5	3.5	4.2
Marston	18.0	16.0	14.5	14.6
Milton	24.4	14.1	13.3	13.3
Standley	42.0	35.2	20.5	17.3
Terry Lake	8.2	5.2	5.8	5.0
Union	12.7	12.7	10.4	9.5
Windsor	18.6	10.8	12.7	10.2

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

FEBRUARY SNOWFALL WAS SLIGHTLY BELOW NORMAL, HOWEVER, THE SNOWPACK IS STILL ABOVE NORMAL. SUMMER FLOWS SHOULD BE NEAR NORMAL IF THE NEXT FEW MONTHS PROVIDE AT LEAST AVERAGE SNOWFALL. SMALL STREAMS SHOULD FLOW GOOD DURING THE EARLY SEASON IF SPRING TEMPERATURES ARE AT LEAST NORMAL. CARRY-OVER STORAGE IS SIMILAR TO LAST YEAR AND NEAR NORMAL. SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	320	110	290
Arkansas at Salida (1)	325	105	313
Cucharas nr LaVeta	11	110	10
Purgatoire at Trinidad	38	100	38

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable Creek	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	125	112
Cucharas and Purgatoire	2	135	146

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	101	113
Cucharas and Purgatoire	2	79	75

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	18.0	0.0	17.3
Clear Creek	11.4	3.8	5.7	8.2
Cucharas	40.0	6.1	0.0	2.9
Great Plains	150.0	43.5	25.2	58.7
Horse Creek	26.9	0.0	0.0	6.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	23.9	17.1	90.1
Meredith	41.9	27.2	22.5	13.1
Model	15.0	1.3	---	3.5
Turquoise	120.5	48.1	40.0	---
Twin Lakes	57.9	41.7	25.5	25.9

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO

as of

MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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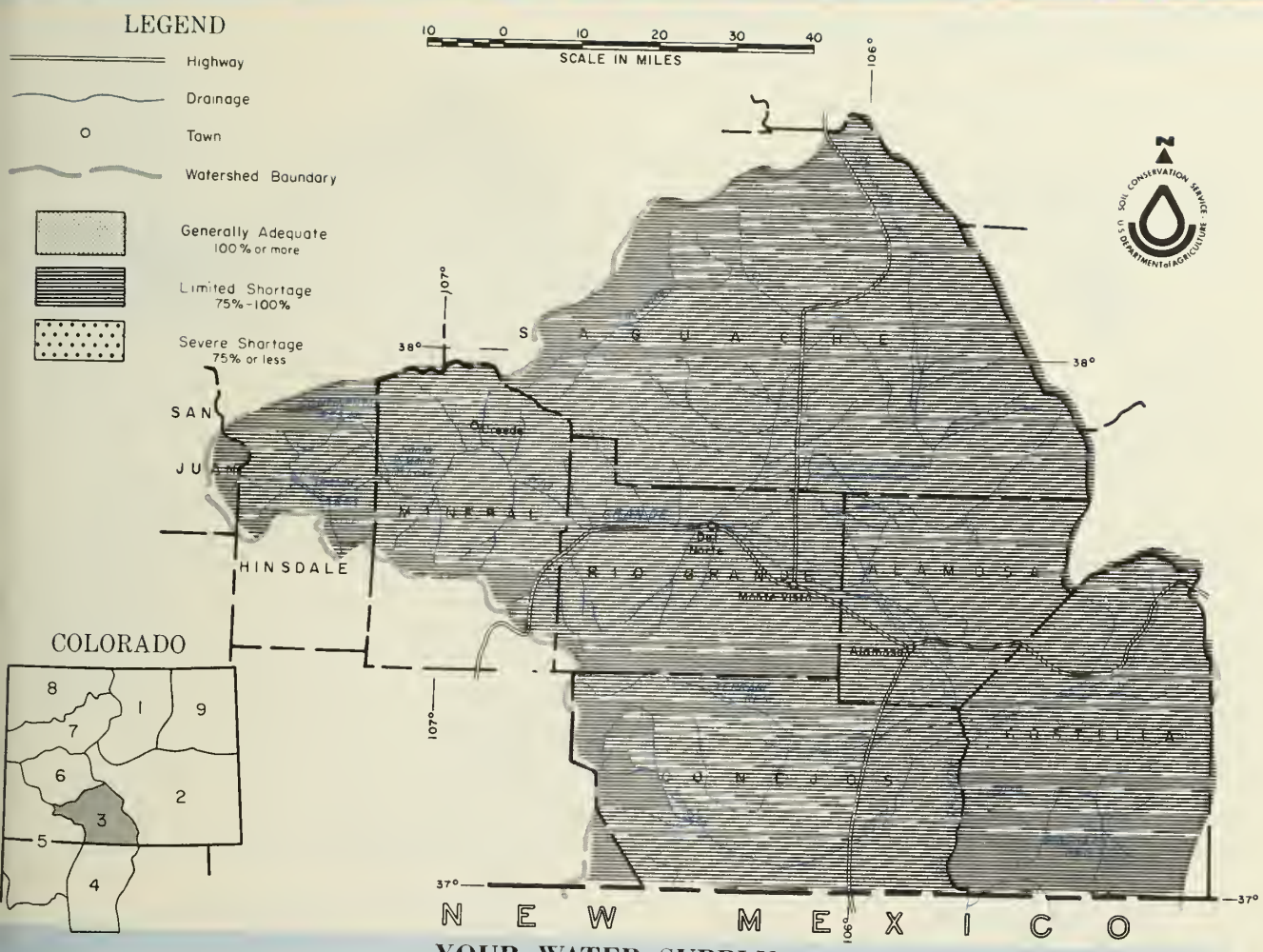

YOUR WATER SUPPLY

STREAMFLOW FORECASTS ARE BELOW THE 1958-72 AVERAGE ON THE RIO GRANDE AND ITS TRIBUTARIES IN COLORADO. ABOVE AVERAGE SNOWFALL IS NEEDED TO ASSURE AVERAGE STREAMFLOWS FOR THIS SEASON. HOWEVER, RESERVOIR STORAGE IS EXCELLENT, BEING 180% OF AVERAGE AND 236% OF LAST YEAR. SOIL MOISTURE CONDITIONS IN THE MOUNTAINS ARE SLIGHTLY BELOW AVERAGE.

This report prepared by

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ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Alamosa abv Terrace	55	89	62
Conejos nr Mogote (1)	190	103	184
Culebra at San Luis (2)	15	88	17
Rio Grande at 30 Mile Bridge (3)	100	83	121
Rio Gr. nr Del Norte(3)	400	85	468
So. Fork at So. Fork	100	87	115

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Exc.	Avg.
Sangre de Cristo Cr.	Exc.	Avg.
Trinchera Creek	Exc.	Avg.

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	66	104
Conejos	3	82	103
Culebra	2	115	131
Rio Grande	10	67	87

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	102	89
Conejos	1	102	89
Culebra	1	93	84
Rio Grande	3	86	79

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	26.7	2.4	4.8	5.2
Platoro	60.0	37.5	2.9	8.6
Rio Grande	45.8	26.8	18.4	16.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103.2	17.5	5.9	13.2
Santa Maria	45.0	7.2	4.8	6.0
Terrace	17.7	9.3	5.7	5.5

† 1958-1972 period

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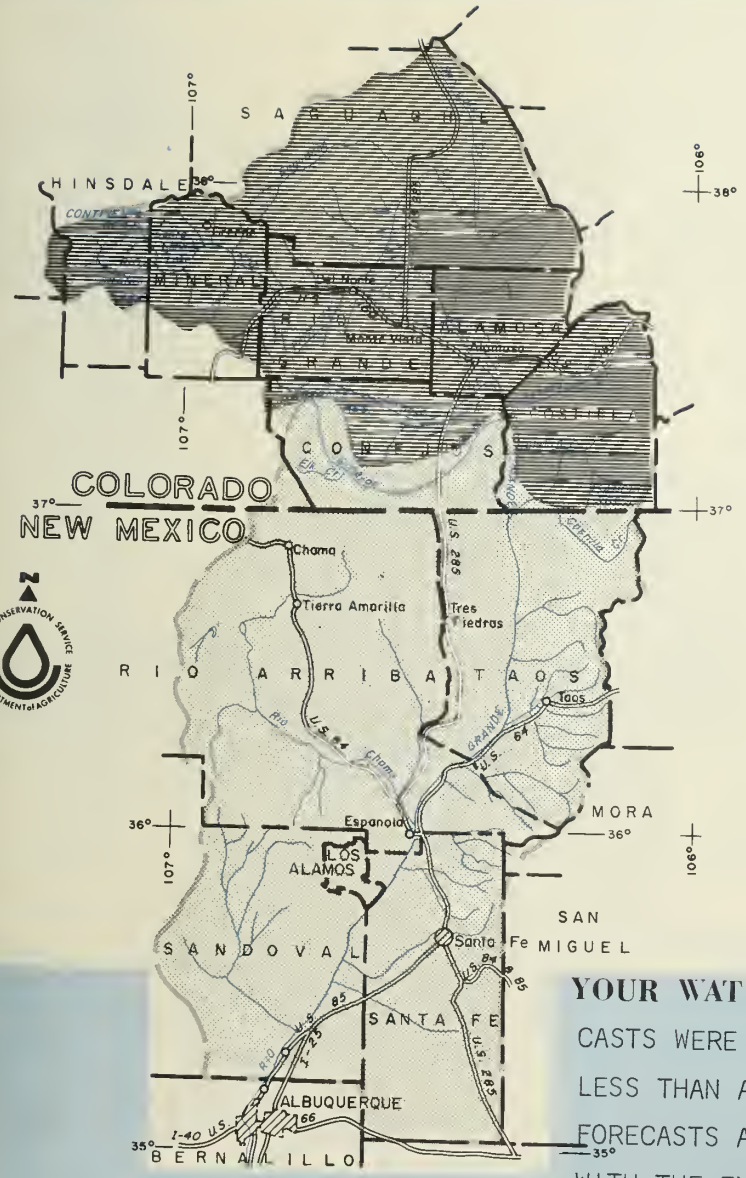
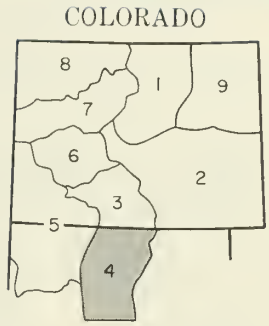
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO

as of
MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO





LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY STREAMFLOW FORECASTS WERE LOWERED FROM LAST MONTH DUE TO LESS THAN AVERAGE SNOWFALL DURING FEBRUARY. FORECASTS ARE ABOVE THE 1958-72 AVERAGE WITH THE EXCEPTION OF THE RIO GRANDE AT OTOWI. WITH AVERAGE SNOWFALL THE REMAINDER OF THE SEASON, STREAMFLOW SHOULD BE AVERAGE TO SLIGHTLY ABOVE. RESERVOIR STORAGE IS MUCH ABOVE AVERAGE. ELEPHANT BUTTE HAS 879,000 ACRE FEET COMPARED TO 382,000 LAST YEAR AND 439,000 AVERAGE. CABALLO AND McMILLEN AVALON ARE SLIGHTLY BELOW LAST YEAR AND THE AVERAGE.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	18	95	19
Pecos at Pecos	55	134	41
Rio Chama at El Vado	200	109	184
Rio Grande at Otowi (2)	525	100	526
Rio Gr. at San Mar (2)	375	106	355
Rio Hondo nr Valdez	16	114	14
Red R. at mouth nr Questa	30	103	29
Jemez R. nr Jemez	30	103	29
Santa Cruz at Cundiyo	17	131	13

The forecast of the Rio Grande at San Marcial is __ % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Exc.	Avg.
Mora River	Exc.	Avg.
Nambe Creek	Exc.	Avg.
Rio Ojo Caliante	Exc.	Avg.
Rio Pueblo de Taos	Exc.	Avg.
Santa Fe Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	83	145
Rio Chama	4	104	132
Rio Grande, NM	10	85	119
Red River	2	83	120

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	2	100	86
Rio Chama	2	173	139
Rio Grande	4	80	106
Red River	1	94	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	100	87	79
Caballo	344	60	73	87
Conchas	273	175	143	186
Elephant Butte	2195	879	382	439

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	127	23	3
McMillen-Avalon	32	14	33	20

+ 1958-1972 period.

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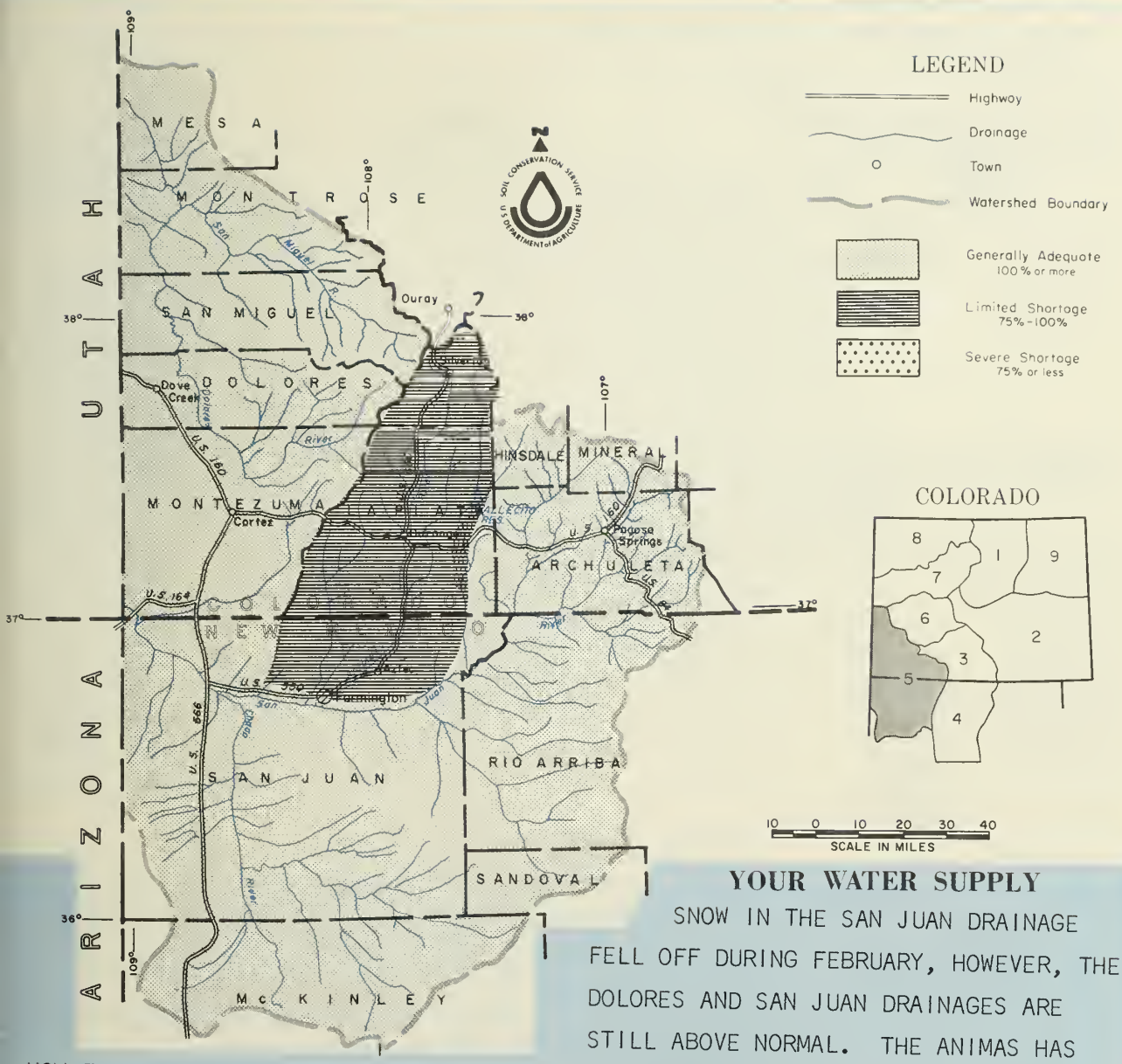
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOW IN THE SAN JUAN DRAINAGE FELL OFF DURING FEBRUARY, HOWEVER, THE DOLORES AND SAN JUAN DRAINAGES ARE STILL ABOVE NORMAL. THE ANIMAS HAS NOW FALLEN BELOW THE 15 YEAR NORMAL. MOST FORECASTS ARE STILL NEAR NORMAL. MORE SNOW IS DEFINITELY NEEDED TO INSURE ADEQUATE SUPPLIES THIS SUMMER. RESERVOIR STORAGE IS ABOVE NORMAL. SOIL MOISTURE IS REPORTED TO BE FROM FAIR TO GOOD.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	385	91	423
Dolores at Dolores	230	100	232
La Plata at Hesperus	21	88	24
Los Pinos at Bayfield (1)	175	88	198
Piedra Cr. at Arboles	180	97	185
San Juan at Carracas	345	97	354
Inflow to Navajo Rs. (1) (Apr-Jul)	600	100	597

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Avg.
Mancos	Avg.	Avg.
San Miguel	Fair	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	72	91
Dolores	4	90	115
San Juan	5	76	101

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	85	97
Dolores	3	85	97
San Juan	3	85	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	15	7	9
Lemon	40	19	21	19
Navajo	1696	985	883	543
Vallecito	126	70	74	54
Narraguinnep		5	16	--
Jackson Gulch		6	5	4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of
MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THERE WAS SLIGHTLY LESS SNOWFALL ON THE GUNNISON DRAINAGE THAN NORMAL DURING FEBRUARY, HOWEVER THE SNOWPACK IS STILL ABOVE NORMAL. FORECASTS RANGE FROM 102% ON THE UPPER GUNNISON TO 114% ON THE LOWER GUNNISON. LOW ELEVATION SNOW IS GOOD. CARRY-OVER STORAGE IS SLIGHTLY ABOVE NORMAL AND SOIL MOISTURE CONDITIONS ARE GOOD.

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DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Gunnison R. inflow to Blue Mesa Res. (1)	800	102	793
Gunnison nr Grand Junction (2)	1350	114	1184
N. Fork of Gunnison (3)	300	114	263
Surface Creek nr Cedaredge	16	100	16
Uncompahgre at Colona	145	108	134

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc.	Avg.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	101	111
Surface Creek	3	86	99
Uncompahgre	3	90	107

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	118	130
Surface Creek	1	92	110
Uncompahgre	2	92	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	360	315	354
Morrow Point	121	115	115	109
Taylor	106	63	40	65

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1958-1972 period.

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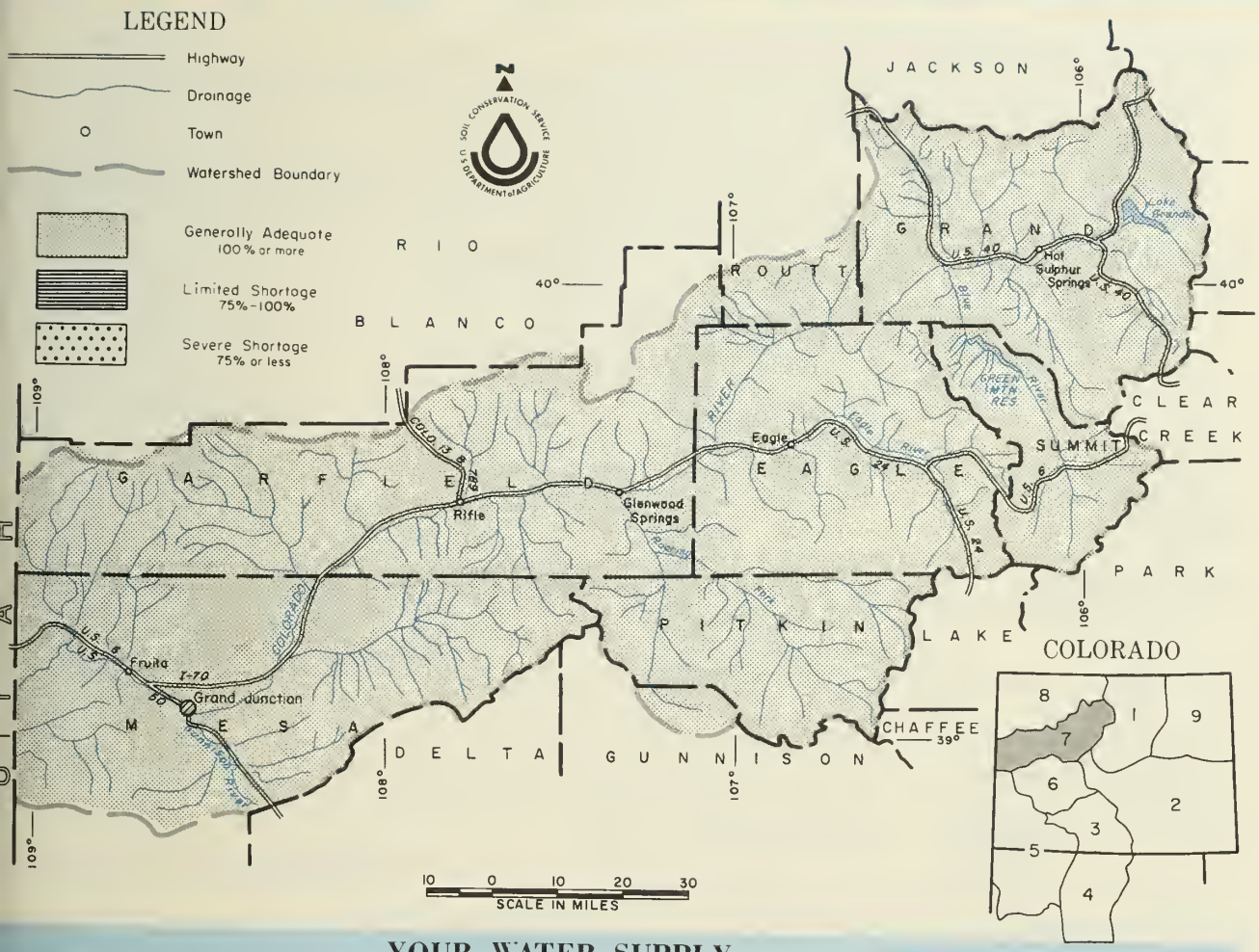
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWPACK CONDITIONS IN THE COLORADO BASIN ARE NEAR NORMAL TO SLIGHTLY ABOVE ON ALL TRIBUTARIES. THEREFORE, STREAMFLOW FORECASTS RANGE FROM NEAR THE 1958-72 AVERAGE ON THE BLUE RIVER AND COLORADO MAINSTEM TO 126% ON THE WILLIAMS FORK. SNOWFALL DURING THE MONTH WAS SLIGHTLY LESS THAN NORMAL BUT THE LOW ELEVATION SNOW COURSES ARE CONSIDERABLY ABOVE AVERAGE. RESERVOIR STORAGE IS ABOVE LAST YEAR'S IN DILLON RESERVOIR AND SLIGHTLY LOWER IN GRANBY, GREEN MOUNTAIN AND WILLIAMS FORK RESERVOIR. SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD.

This report prepared by
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AREA CONSERVATIONIST
GLENWOOD SPRINGS, COLORADO
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue R. inflow to Dillon	170	100	169
Blue Abv Green Mt. (1)	300	101	297
Colo. R. inflow to Granby Res. (2)	240	105	228
Colo. R. nr Dotsero(3)	1475	103	1434
Roaring Fk. at Glenwood (4)	750	105	713
Wm Fk. nr Parshall (5)	80	126	63
Willow Cr. inflow to Willow Cr. Res.	55	117	47
Colorado nr Cameo (6)	2500	105	2370

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Gra as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Di and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plu ch in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (4

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	131	102
Colorado	20	128	114
Plateau	3	87	98
Roaring Fork	7	115	111
Williams Fork	3	131	133
Willow	2	147	115

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	103	118
Colorado	5	94	100
Roaring Fork	1	56	80
Willow	2	96	108

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	239	219	233
Granby	466	388	333	235
Green Mountain	147	73	77	67
Homestake	43	27	18	17

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	62	62	65
Vega	32	14	14	11
Williams Fork	97	46	57	29
Willow Creek	9	7		7

+ 1958-1972 period

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"The Conservation of Water begins with the Snow Survey"

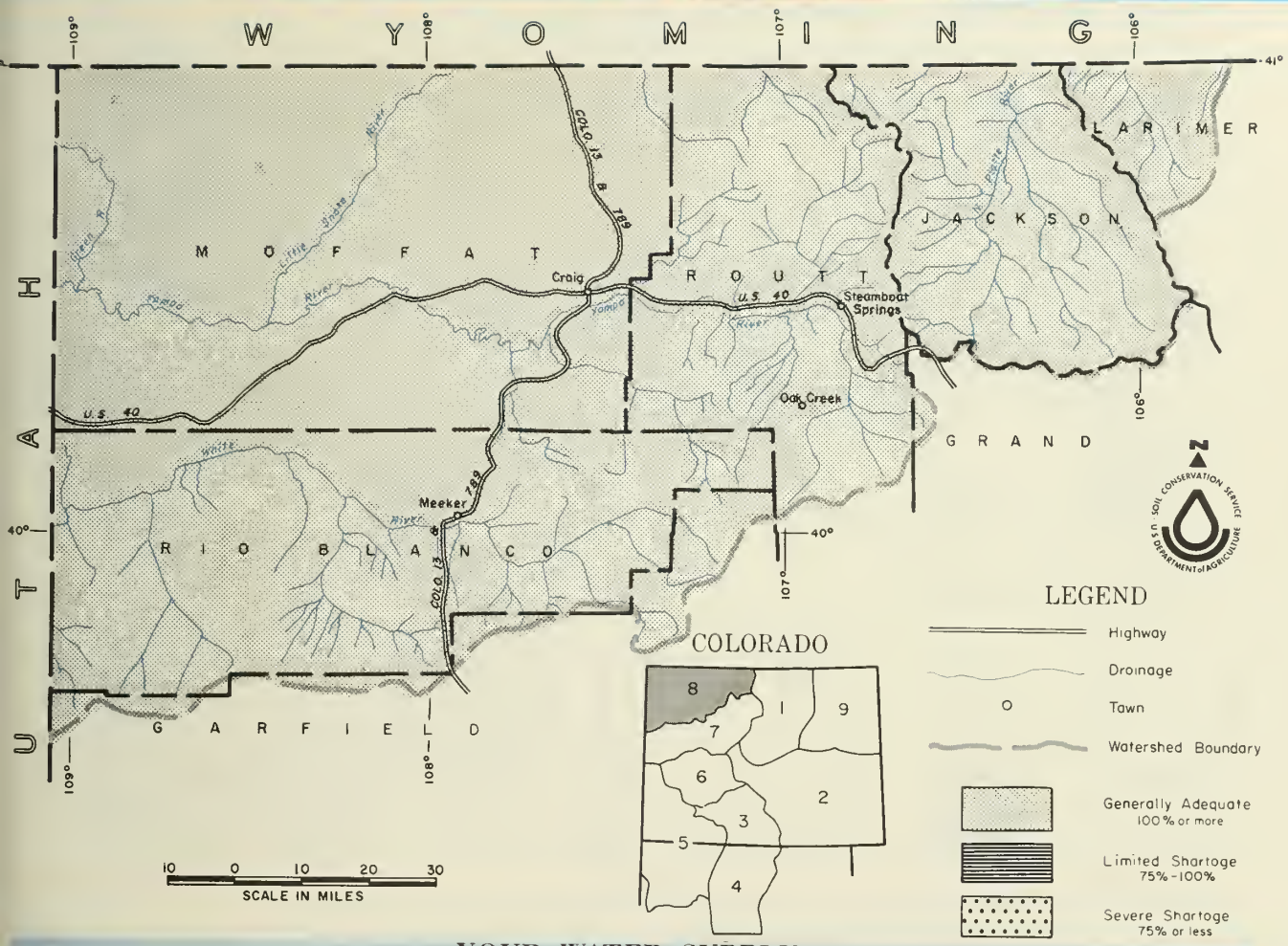
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of

MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL IN THE NORTHERN PORTION OF THE STATE STILL REMAINS HIGH. EVEN THE LOW ELEVATION SNOW IS MUCH ABOVE NORMAL. IF THE SNOWPACK CONTINUES TO FALL AT EVEN A NORMAL RATE, SUMMER FLOWS SHOULD BE EXCELLENT. SMALL STREAMS SHOULD ALSO HAVE EXCELLENT FLOWS THIS SUMMER. SOIL MOISTURE IN THE IRRIGATED AREAS IS REPORTED TO BE EXCELLENT.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. D. BUROICK---STATE CONSERVATIONIST
DENVER COLORADO

DUANE L. JOHNSON --- AREA CONSERVATIONIST
GLENWOOD SPRINGS, COLORADO

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Elk at Clark	225	114	198
Laramie nr Woods	197	155	127
Little Snake at Lily	450	139	324
N. Platte at Northgate	400	167	240
White nr Meeker	300	102	295
Yampa nr Maybell	1100	118	905
Yampa at Steamboat Springs	325	119	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average †
Elk	1	137	110
Laramie	2	142	123
North Platte	5	126	117
White	2	108	102
Yampa	5	132	117

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average †
Laramie	2	110	100
North Platte	2	96	108
Yampa	1	71	102

† 1958-1972 period

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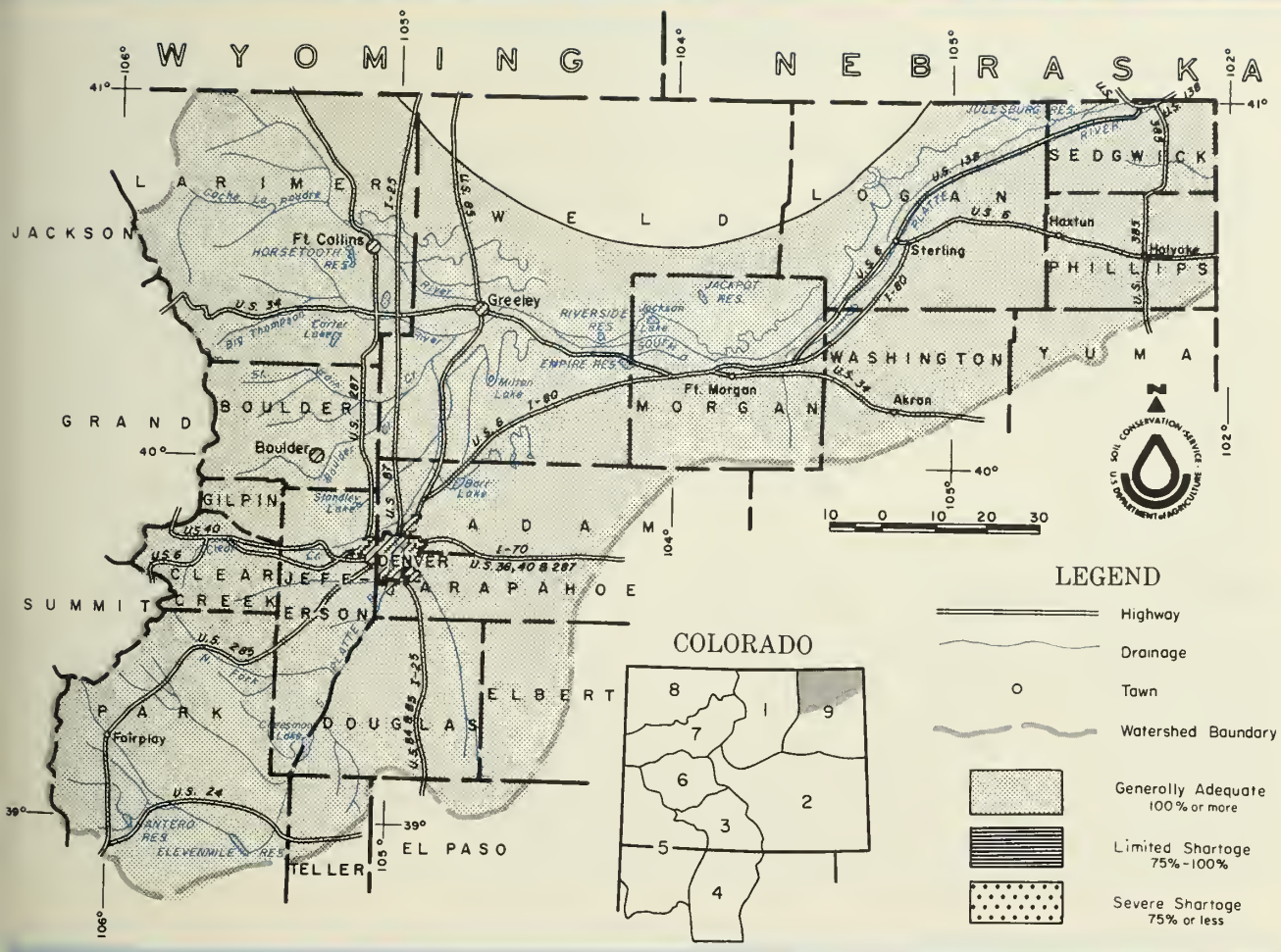
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MARCH 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

FEBRUARY SNOW WAS SLIGHTLY LESS THAN NORMAL BUT THE SNOWPACK IS STILL GENERALLY ABOVE NORMAL. THE UPPER SOUTH PLATTE AND THE ST. VRAIN ARE THE ONLY TWO DRAINAGES THAT HAVE LESS THAN NORMAL SNOW. ALL STREAMS IN THE BASIN SHOULD FLOW NEAR THE NEW 15 YEAR AVERAGE. CARRY-OVER STORAGE IS 104% OF NORMAL AND WILL PROVIDE SOME SUPPLEMENTAL WATER. SMALL STREAMS SHOULD FLOW ABOUT NORMAL. SOIL MOISTURE IS GOOD.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BURDICK --- STATE CONSERVATIONIST
D. W. GILLASPIE --- AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
STERLING, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	115	107	107
Boulder at Orodell	55	106	49
Cache La Poudre at Canyon Mouth (2)	260	105	247
Clear Cr. at Golden(3)	135	107	127
Saint Vrain at Lyons (4)	78	104	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Ft. Morgan	Avg.	Avg.
South Platte from Ft. Morgan to Sterling	Avg.	Avg.
South Platte below Sterling	Avg.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	120	107
Boulder	3	132	109
Cache La Poudre	8	119	117
Clear Creek	6	133	102
Saint Vrain	3	114	95
South Platte	3	91	82

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	82	74
Boulder	1	100	82
Cache La Poudre	2	110	100
Clear Creek	2	96	98
Saint Vrain	2	95	70
South Platte	2	100	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	91.3	95.1	87.1
Cheesman	79.0	50.4	41.4	56.7
Eleven Mile	97.8	97.8	90.9	87.0
Empire	37.7	8.5	26.5	29.6
Horsetooth	143.5	122.6	95.2	96.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	28.8	29.7	31.7
Julesburg	28.2	19.8	19.8	20.4
Prewitt	32.8	20.6	18.1	18.1
Point of Rocks	70.0	69.8	70.3	59.2
Riverside	57.5	57.5	53.2	53.0

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 53 67
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	2/26	49	15.8	10.9	14.1
McIntyre	NS			---	---
Roach	2/26	60	19.9	14.3	14.9
North Platte River					
Cameron Pass	2/27	68	26.5	22.5	22.5
Columbine Lodge	2/26	71	23.5	16.1	20.4
Northgate	2/27	27	7.0	6.6	5.5
Park View	2/25	33	8.5	7.7	7.8
Willow Cr. Pass (B)	2/25	40	11.4	8.8	10.4
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	2/26	26	7.3	5.9	6.2
Boulder Falls	2/26	40	11.7	8.7	10.3
University Camp	2/26	50	15.4	11.5	15.1
Big Thompson River					
Deer Ridge	2/27	18	4.8	5.7	4.0
Hidden Valley	2/28	31	9.1	9.0	8.1
Lake Irene (B)	2/26	59	19.0	14.9	19.0
Long's Peak	2/27	32	9.7	6.2	8.5
Two Mile	2/26	44	12.4	10.2	11.9
Cache La Poudre					
Bennett Creek	2/26	31	9.6	6.7	---
Big South	2/28	0	0.0	2.4	2.3
Cameron Pass	2/27	68	26.5	22.5	22.5
Chambers Lake	2/28	27	9.5	8.0	8.1
Deadman Hill	2/26	49	15.8	10.9	14.1
Hour Glass Lake	2/26	29	9.2	6.4	5.3
Joe Wright	2/27	63	21.9	18.2	---
Lost Lake	2/28	36	10.7	8.7	10.2
Pine Creek	2/26	10	2.6	2.9	1.6
Red Feather	2/26	25	6.8	6.2	5.4
Clear Creek					
Baltimore (B)	2/26	26	7.3	5.9	6.2
Berthoud Falls	2/26	46	13.5	9.6	11.6
Empire	2/26	28	7.6	4.3	6.0
Grizzly Peak (B)	2/26	52	15.3	9.5	14.6
Loveland Lift	2/27	43	12.0	12.8	16.9
Loveland Pass	2/27	46	13.6	10.1	12.7
Saint Vrain River					
Copeland Lake	2/27	15	3.8	4.1	3.8
Ward	2/28	19	4.0	4.9	4.8
Wild Basin	2/27	32	9.8	6.4	9.9
South Platte River					
Como	2/26	17	3.9	7.1	---
Geneva Park	2/27	14	2.8	3.9	3.3
Horseshoe Mt.	2/25	29	6.9	6.6	---
Hoosier Pass	2/27	36	9.8	8.5	10.6
Jefferson Creek	2/26	22	5.1	7.1	7.6
Mosquito	2/25	23	6.0	6.7	---
Trout Creek Pass	2/25	23	4.9	4.6	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	2/22	48	10.0	4.9	5.1
Cooper Hill (B)	3/01	37	10.2	7.4	9.0
East Fork	2/22	30	8.0	5.9	8.0
Four Mile Park	2/28	22	5.1	4.3	5.1
Fremont Pass	2/22	46	13.2	10.2	12.9
Garfield	2/25	41	13.2	12.5	11.3
Hermit Lake	2/26	31	9.8	8.6	---
Monarch Pass	2/25	51	15.6	14.4	14.0
Tennessee Pass	2/27	30	6.6	7.7	8.7
Twin Lakes Tunnel	2/26	30	8.5	6.0	8.9
Westcliffe	2/26	29	9.2	6.4	6.0
Cucharas River					
Blue Lakes	2/28	20	6.9	3.6	---
Cucharas Pass	2/28	36	11.2	8.0	---
LaVeta Pass (B)	2/28	37	12.7	7.3	7.2
Purgatoire River					
Bourbon	2/26	24	6.4	6.8	5.9
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	2/28	23	5.4	9.8	5.1
Summitville	2/26	52	15.2	21.2	14.7
Conejos River					
Cumbres	2/25	54	17.6	19.0	16.5
LaManga	2/25	53	15.8	19.6	---
Platoro	2/27	43	13.2	17.8	13.9
River Springs	2/27	20	5.7	7.6	5.0
Culebra River					
Brown Cabin	2/28	25	7.3	6.9	---
Cottonwood (B)	2/28	19	5.5	6.0	---
Culebra	2/22	25	6.4	9.3	7.4
LaVeta Pass (B)	2/28	37	12.7	7.3	7.2
Trinchera (B)	2/27	28	8.4	8.6	---
Rio Grande					
Cochetopa Pass	2/26	24	5.4	5.8	4.8
Grayback	2/26	42	12.3	17.4	---
Hiway	2/27	51	18.3	26.2	19.5
Lake Humphrey	2/25	21	3.5	7.6	6.1
Love Lake	2/27	24	5.4	11.6	---
Pass Creek	2/27	34	10.3	16.0	9.9
Pool Table	2/25	17	2.5	5.7	6.0
Porcupine	2/28	24	6.0	8.2	9.1
Santa Maria	2/27	16	3.2	5.0	4.1
Upper Rio Grande	2/27	21	5.3	10.2	7.6
Wolf Creek Pass	2/27	60	21.6	27.5	22.0
Wolf Creek Sum. (B)	2/27	64	20.7	31.7	22.5
RIO GRANDE BASIN-NM					
Pecos River					
Panchuela	2/27	16	4.8	5.8	3.3
Rio Chama					
Bateman	2/28	32	11.6	11.0	9.3
Capulin	2/27	23	5.4	4.7	3.7
Chama Divide	3/01	18	4.4	5.1	3.0
Chamita	2/27	30	9.3	8.7	7.3
Rio Grande					
Big Tesuque	2/25	31	8.6	9.6	4.9
Blue Bird Mesa	2/28	16	4.3	4.1	4.0
Cordova	2/25	33	9.6	8.3	9.6
Elk Cabin	2/25	20	6.2	6.4	3.1
Hopewell	2/26	47	15.7	15.0	---
La Cueva	2/27	23	6.2	7.3	---
Pajarito Peak	2/28	4	1.4	2.3	1.2
Payrole	2/26	27	8.1	9.5	7.8
Quemazon	2/27	28	8.1	9.7	7.8
Rio En Medio	2/25	40	11.7	13.2	8.0
Sandoval	2/27	15	4.4	6.2	4.5
Taos Canyon	2/26	19	5.6	6.4	3.8
Teakettle	2/26	33	8.3	9.3	---
Tres Ritos	2/26	20	5.2	7.7	4.6
Red River					
Hematite Park (B)	2/25	14	4.7	6.0	3.5
Red River	2/25	19	5.6	6.3	5.0

NOTE: NS - No Survey
(B) - On adjacent drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of March 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG 53 67
SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	2/27	35	10.8	14.1	10.0
Lemon	2/28	27	7.4	11.2	---
Mineral Creek	2/27	35	10.6	16.2	12.9
Molas Lake	2/27	36	11.1	13.8	11.2
Purgatory	2/27	44	12.4	22.9	---
Red Mt. Pass (B)	2/27	65	21.6	29.9	25.4
Silverton Sub-Sta	2/27	26	7.3	10.6	6.7
Spud Mountain	2/26	50	16.7	24.1	19.7
Dolores River					
Lizard Head	2/27	48	15.1	16.5	13.9
Lone Cone	3/01	50	16.5	15.1	---
Rico	2/27	30	8.3	10.5	7.2
Telluride	2/27	33	8.7	9.3	6.7
Trout Lake	2/27	44	13.4	14.0	11.8
San Juan River					
Chama Divide (B)	3/01	18	4.4	5.1	3.0
Chamita (B)	2/27	30	9.3	8.7	7.3
Upper San Juan	2/27	67	24.4	32.3	24.5
Wolf Cr. Pass (B)	2/27	60	21.6	27.5	22.0
Wolf Cr. Summit	2/27	64	20.7	31.7	22.5
GUNNISON BASIN					
Gunnison River					
Alexander Lake	2/27	54	16.7	19.4	17.4
Blue Mesa	2/27	38	9.5	7.3	6.9
Butte	2/25	46	19.2	10.5	---
Cochetopa Pass (B)	2/26	24	5.4	5.8	4.8
Crested Butte	2/27	49	15.0	11.1	10.3
Keystone	2/27	59	19.2	18.3	16.7
Lake City	2/25	26	6.6	7.1	7.0
Mesa Lakes (B)	2/27	48	15.7	16.2	13.5
McClure Pass	2/27	48	15.7	16.7	14.7
Park Cone	2/28	33	8.7	7.3	8.8
Park Reservoir	2/26	59	17.3	22.0	19.5
Porphyry Creek	2/25	54	16.1	15.6	13.7
Tomichi	2/25	47	14.0	11.5	10.5
Surface Creek					
Alexander Lake	2/27	54	16.7	19.4	17.4
Mesa Lakes (B)	2/27	48	15.7	16.2	13.5
Park Reservoir	2/26	59	17.3	22.0	19.5
Uncompahgre River					
Ironton Park	2/27	49	16.0	12.2	11.3
Red Mountain Pass	2/27	65	21.6	29.9	25.4
Telluride (B)	2/27	33	8.7	9.3	6.7
COLORADO BASIN					
Blue River					
Blue River	2/26	32	7.7	7.2	7.4
Fremont Pass	2/22	46	13.2	10.2	12.9
Frisco	2/26	24	5.6	4.9	6.4
Grizzly Peak	2/26	52	15.3	9.5	14.6
Hoosier Pass (B)	2/27	36	9.8	8.5	10.6
Shrine Pass	2/26	52	15.2	12.9	14.5
Snake River	2/26	31	8.0	4.8	7.0
Summit Ranch	2/26	27	7.5	5.0	7.0

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG 53 67
Colorado River					
Arrow	2/27	48	14.0	10.7	10.5
Berthoud Pass	2/25	53	15.7	12.0	12.8
Berthoud Summit	2/26	58	17.5	13.1	15.4
Cooper Hill	3/01	37	10.2	7.4	9.0
Fiddler Gulch	NS			---	14.0
Glenmar Ranch	2/25	36	10.0	7.2	7.0
Gore Pass	2/26	28	8.2	7.8	8.6
Grand Lake	2/25	36	9.3	6.0	7.0
Lake Irene	2/26	59	19.0	14.9	19.0
Lapland	2/26	36	10.1	7.4	9.0
Lulu	2/26	60	18.9	13.8	14.9
Lynx Pass	2/26	36	9.3	10.1	10.5
McKenzie Gulch	2/27	30	7.5	5.5	5.5
Middle Fork	2/25	37	10.2	7.8	8.1
Milner	2/26	41	11.8	9.5	---
North Inlet	2/24	32	9.0	6.4	7.6
Pando	2/22	30	8.2	7.1	8.2
Phantom Valley	2/26	33	9.2	8.0	9.3
Ranch Creek	2/27	40	11.6	7.9	7.8
Tennessee Pass (B)	2/27	30	6.6	7.7	8.7
Vail Pass	2/26	50	14.6	12.0	14.5
Vasquez	2/26	47	13.4	8.5	10.2
Roaring Fork River					
Aspen	2/25	54	15.7	12.2	14.0
Independence Pass	2/26	41	10.6	11.2	13.9
Ivanhoe	2/26	58	18.4	14.6	13.9
Kiln	2/26	46	13.3	9.3	---
Lift	2/25	47	13.7	10.8	13.6
McClure Pass	2/27	48	15.7	16.7	14.7
Nast	2/26	31	8.5	6.1	5.5
North Lost Trail	2/27	47	15.6	14.0	13.3
Williams Fork River					
Glenmar Ranch	2/25	36	10.0	7.2	7.0
Jones Pass	2/25	52	15.7	12.4	11.9
Middle Fork	2/25	37	10.2	7.8	8.1
Willow Creek					
Granby	2/25	30	8.2	4.5	6.5
Willow Creek Pass	2/25	40	11.4	8.8	10.4
Plateau Creek					
Mesa Lakes	2/27	48	15.7	16.2	13.5
Park Reservoir	2/26	59	17.3	22.0	19.5
Trickle Divide	2/26	61	19.9	22.8	21.0
YAMPA BASIN					
Elk River					
Elk River	2/26	56	17.5	12.8	15.9
Hahn's Peak	2/26	49	14.2	9.3	---
Yampa River					
Buffalo Pass	2/25	116	40.9	29.8	---
Columbine Lodge(B)	2/26	71	23.5	16.1	20.4
Dry Lake	2/25	67	22.0	16.3	17.8
Lynx Pass (B)	2/26	36	9.3	10.1	10.5
Rabbit Ears	2/26	78	25.9	19.5	21.8
Yampa View	2/27	54	17.1	12.1	13.0
White River					
Burro Mountain	2/26	49	14.3	15.1	15.0
Rio Blanco	2/25	47	14.4	11.3	13.1

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	11/14/73	11.1	8.5	7.7	6.6
Willow Pass	11/20/73	9.5	6.1	7.5	6.9
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	10/19/73	6.9	3.1	3.1	3.8
Big Thompson River					
Beaver Dam	10/19/73	7.1	3.3	4.5	4.1
Guard Station	10/19/73	6.9	2.9	3.2	4.8
Two Mile	10/19/73	9.1	4.5	5.3	5.5
Clear Creek					
Clear Creek	11/26/73	9.5	7.1	7.1	6.8
Hoop Creek	10/18/73	4.9	2.4	2.8	2.9
Cache La Poudre River					
Feather	12/13/73	10.1	5.1	4.5	4.7
Laramie Road	10/17/73	12.4	7.4	6.9	7.8
South Platte River					
Hoosier Pass	9/27/73	7.8	5.5	5.5	4.9
Kenosha Pass	9/27/73	4.4	3.3	3.3	2.6
ARKANSAS BASIN					
Arkansas River					
Garfield	10/19/73	6.7	5.2	5.0	4.0
Leadville	10/18/73	7.8	4.1	4.0	4.1
Twin Lakes Tunnel	10/18/73	4.5	2.2	2.4	2.1
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	11/12/73	10.7	4.7	4.6	5.3
Rio Grande					
Bristol View	11/12/73	6.1	2.3	4.1	4.0
La Veta	10/29/73	11.9	6.4	6.9	7.6
RIO GRAND BASIN - NEW MEXICO					
Rio Chama					
Bateman	10/23/73	6.7	2.7	2.6	2.5
Chamita	10/23/73	8.0	4.4	1.5	2.6
Rio Grande					
Aqua Piedra	2/26/74	7.2	5.2	5.2	3.6
Big Tesuque	10/15/73	3.7	2.0	3.0	1.6
Rio En Medio	10/15/73	3.5	1.6	2.1	1.4
Taos Canyon	2/26/74	3.3	2.1	2.2	2.2
Red River					
Red River Summit	2/25/74	4.8	1.5	1.5	2.1

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of March 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	10/25/73	9.1	3.8	7.2	6.0
Mineral Creek	12/10/73	5.7	2.9	3.2	3.4
Molas Lake	10/25/73	9.4	7.1	5.8	4.8
Dolores River					
Dolores	11/15/73	19.6	2.0	11.4	7.7
Lizard Head	11/05/73	11.8	1.2	4.1	6.9
Rico	11/05/73	13.8	1.4	9.3	9.6
GUNNISON BASIN					
Gunnison River					
King	10/19/73	3.3	2.6	2.2	2.0
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	9/27/73	4.2	3.3	3.2	2.8
Colorado River					
Berthoud Pass	10/18/73	3.9	3.2	3.2	2.8
Gore	11/20/73	4.9	2.4	3.1	3.1
Grand Mesa	10/23/73	12.5	11.3	12.3	10.3
Ranch Creek	10/19/73	8.7	4.9	5.4	5.8
Vail	11/26/73	12.3	7.1	6.9	7.0
Roaring Fork River					
Placita	11/28/73	9.3	4.4	7.8	5.5
YAMPA BASIN					
Yampa River					
Hahn's Peak	11/14/73	19.0	8.6	12.1	8.4

ALL PROFILES 4 FEET DEEP

USDA SCS-PORTLAND OREG 1967

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE
Collaborating with
COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
APR. 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

USDA SCS PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I - SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II - ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Bronson Trinchero, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III - RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV - RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V - DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI - GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII - COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII - YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX - LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Hoxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I - SNOW SURVEY MEASUREMENTS

APPENDIX II - SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

APRIL 1, 1974

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
APRIL 1, 1974

SNOWFALL WAS DEFICIENT DURING MARCH IN BOTH STATES AND ESPECIALLY IN NORTHERN NEW MEXICO AND SOUTHERN COLORADO. SNOW COURSES THAT WERE WELL ABOVE AVERAGE AS OF MARCH 1st ARE NOW BELOW NORMAL. SOME COURSES IN NEW MEXICO ARE SUBSTANTIALLY BELOW NORMAL. FORECASTS ARE BASED ON AVERAGE PRECIPITATION FOR THE REMAINDER OF THE YEAR, BUT A NUMBER OF AREAS WILL NEED ADDITIONAL SNOW TO INSURE ADEQUATE WATER THIS SUMMER.

COLORADO

THE SNOW IN NORTHERN COLORADO IS WELL ABOVE AVERAGE, BUT STARTS TO DIMINISH TO THE SOUTH AND BY THE STATE LINE IS CONSIDERABLY BELOW NORMAL. SNOW IN THE SAN JUAN AND RIO GRANDE BASINS IS ONLY ABOUT 75% OF THE 1958-72 AVERAGE. CARRY-OVER STORAGE IS GOOD THROUGHOUT THE STATE AND WILL PROVIDE AN EXCELLENT SUPPLEMENT. SOIL MOISTURE CONDITIONS RANGE FROM GOOD IN THE NORTH TO FAIR TO POOR IN THE SOUTH.

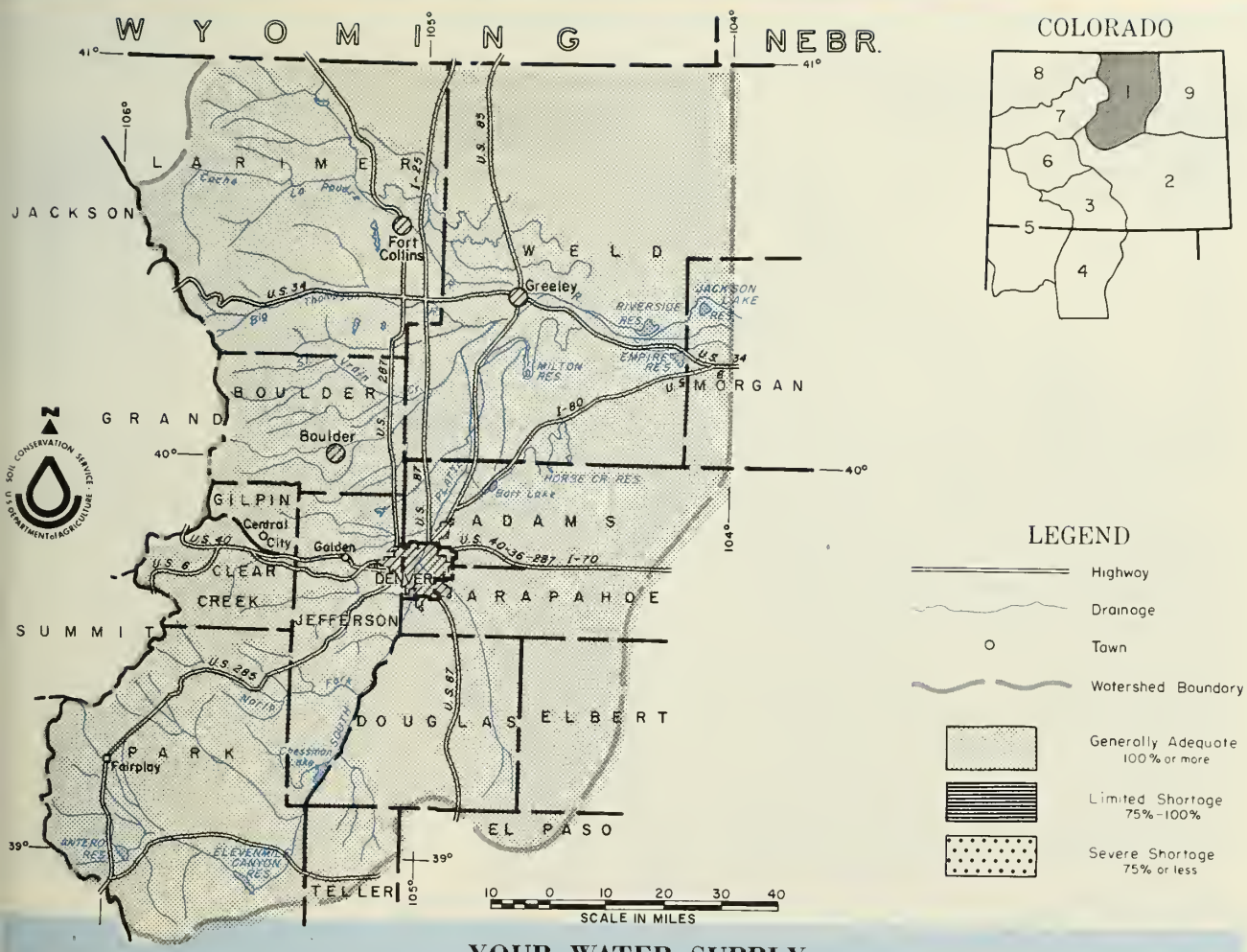
NEW MEXICO

THE SNOWPACK IN NORTHERN NEW MEXICO IS DEFICIENT. SOME MELT HAS ALREADY TAKEN PLACE. FORECASTS WERE REDUCED ON ALL STREAMS. CARRY-OVER STORAGE IS GOOD. ELEPHANT BUTTE NOW CONTAINS 794,000 ACRE FEET. SOIL MOISTURE CONDITIONS ARE RATED AS POOR TO FAIR. ADDITIONAL SNOW IS NEEDED TO INSURE ADEQUATE WATER THIS SUMMER.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO
as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL DURING MARCH WAS SLIGHTLY BELOW NORMAL, HOWEVER, CURRENT SNOW IS STILL SLIGHTLY ABOVE NORMAL EXCEPT ON THE UPPER SOUTH PLATTE. HERE THE SNOWPACK FELL TO 90% OF THE 15 YEAR NORMAL. SUMMER FORECASTED FLOWS ARE ALSO NEAR NORMAL. ADDITIONAL SNOW WOULD ASSURE ADEQUATE WATER THIS SUMMER, HOWEVER, NO SEVERE SHORTAGE IS ANTICIPATED AT THIS TIME. SOIL MOISTURE CONDITIONS ARE RATED AS GOOD. CARRY-OVER STORAGE IS EXCELLENT.

This report prepared by

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake(1)	110	103	107
Boulder at Orodell	52	106	49
Cache La Poudre at Canyon Mouth (2)	245	99	247
Clear Creek at Golden(3)	127	100	127
St. Vrain at Lyons (4)	75	100	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Avg.	Fair
Coal Creek	Avg.	Fair
North Fork of South Platte	Avg.	Fair
North Fork of Cache La Poudre	Exc.	Fair
Ralston Creek	Avg.	Fair
Rock Creek	Avg.	Fair

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow mi diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	133	110
Boulder	3	143	114
Cache La Poudre	8	109	111
Clear Creek	6	141	108
Saint Vrain	3	143	109
South Platte	3	105	90

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	96	92
Boulder	1	100	86
Cache La Poudre	2	109	114
Clear Creek	2	99	103
Saint Vrain	3	96	92
South Platte	1	93	93

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Antero	33.0	15.9	15.9	13.9
Barr Lake	32.2	25.8	25.9	24.5
Black Hollow	8.0	4.6	4.4	3.9
Boyd Lake	44.0	44.0	37.5	37.8
Cache La Poudre	9.5	8.3	8.1	8.2
Carter Lake	108.9	100.7	100.1	95.4
Chambers Lake	8.8	3.8	4.7	3.4
Cheesman	79.0	54.7	39.4	58.5
Cobb Lake	34.3	19.1	20.9	15.1
Eleven Mile	97.8	97.0	91.8	87.5
Fossil Creek	11.6	9.1	9.5	8.1
Gross	43.1	29.7	20.7	27.8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Halligan	6.4	6.4	6.4	5.2
Horsetooth	143.5	121.1	105.4	110.6
Lake Loveland	14.3	12.2	9.1	9.7
Lone Tree	9.2	8.3	9.0	6.7
Mariano	5.4	5.0	5.6	5.2
Marshall	10.3	7.7	4.0	4.7
Marston	18.0	16.4	15.6	15.4
Milton	24.4	17.1	16.7	14.2
Standley	42.0	35.2	24.7	18.9
Terry Lake	8.2	6.3	6.3	5.3
Union	12.7	12.7	10.9	9.8
Windsor	18.6	11.5	14.0	12.1

+ 1958-1972 period

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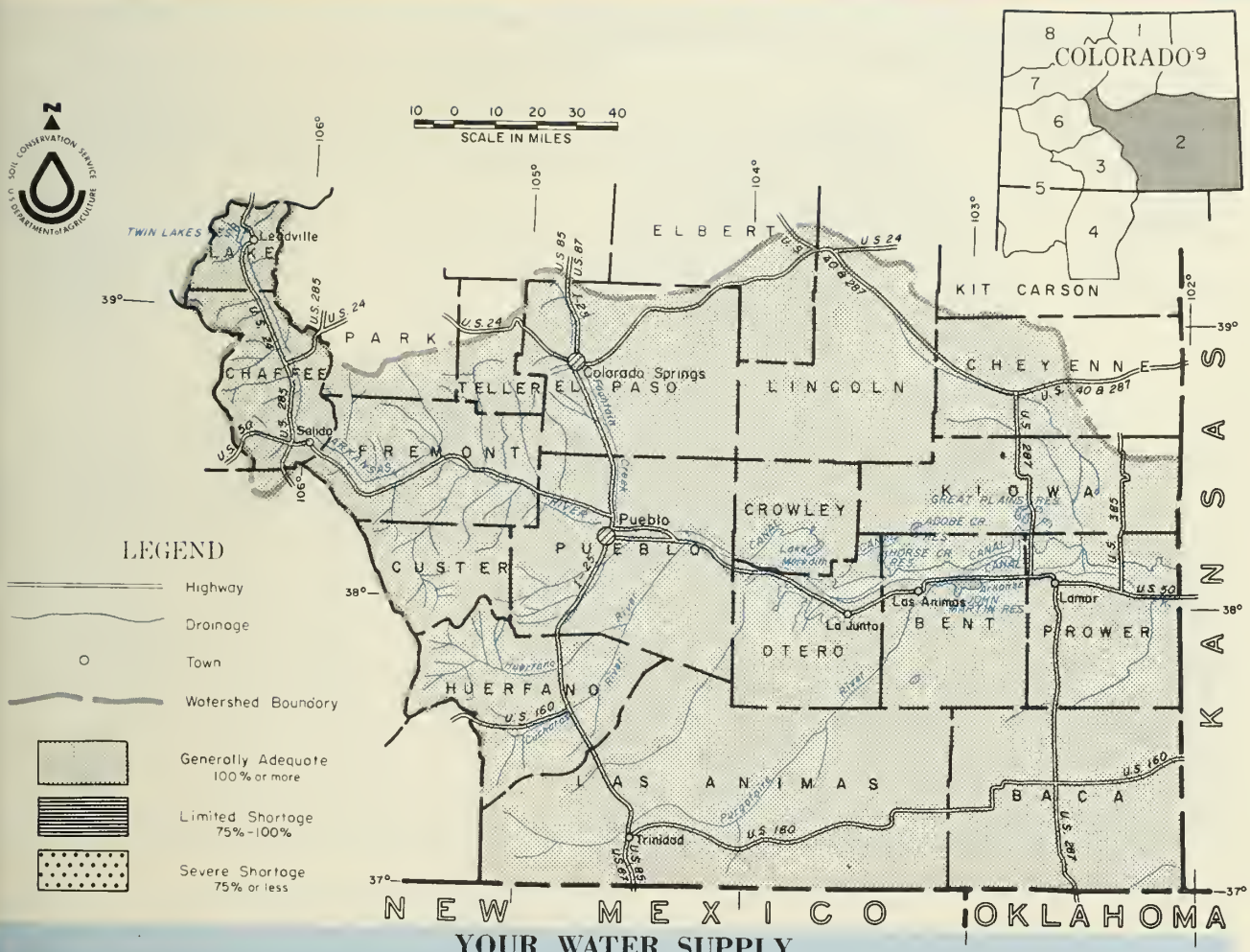
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO
as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOWPACK CONTINUES TO ACCUMULATE AT NEAR AVERAGE WATER CONTENTS SO STREAMFLOW FORECASTS FOR THE COMING SEASON RANGE FROM 95% ON THE ARKANSAS TO ABOUT 110% ON THE CUCHARAS. RESERVOIR STORAGE IS 156% OF LAST YEAR'S AND SLIGHTLY ABOVE THE 1958-72 AVERAGE. JOHN MARTIN CONTAINS 28,500 ACRE FEET COMPARED TO 20,400 LAST YEAR. TURQUOISE CONTAINS 49,400 COMPARED TO 49,700. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD. AVERAGE TO ABOVE AVERAGE SNOWFALL IS NEEDED TO HAVE AVERAGE STREAMFLOW.

This report prepared by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	275	95	290
Arkansas at Salida (1)	300	96	313
Cucharas nr La Veta	11	110	10
Purgatoire at Trinidad	39	103	38

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Exc.	Fair
Fountain Creek	Exc.	Fair
Grape	Exc.	Fair
Hardscrable Creek	Exc.	Fair
Huerfano	Exc.	Fair
Monument Creek	Exc.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	10	119	115
Cucharas	1	78	139
Purgatoire	1	82	109

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	110	117
Cucharas and Purgatoire	1	67	67

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	19.7	0.0	16.6
Clear Creek	11.4	3.4	6.2	8.1
Cucharas	40.0	6.6	0.0	2.9
Great Plains	150.0	51.0	34.2	61.3
Horse Creek	26.9	0.0	0.0	6.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	28.5	20.4	90.8
Meredith	41.9	26.6	22.1	14.0
Model	15.0	7.4	8.0	3.6
Turquoise	120.5	49.4	49.7	---
Twin Lakes	57.9	36.0	26.0	26.1

+ 1958-1972 period.

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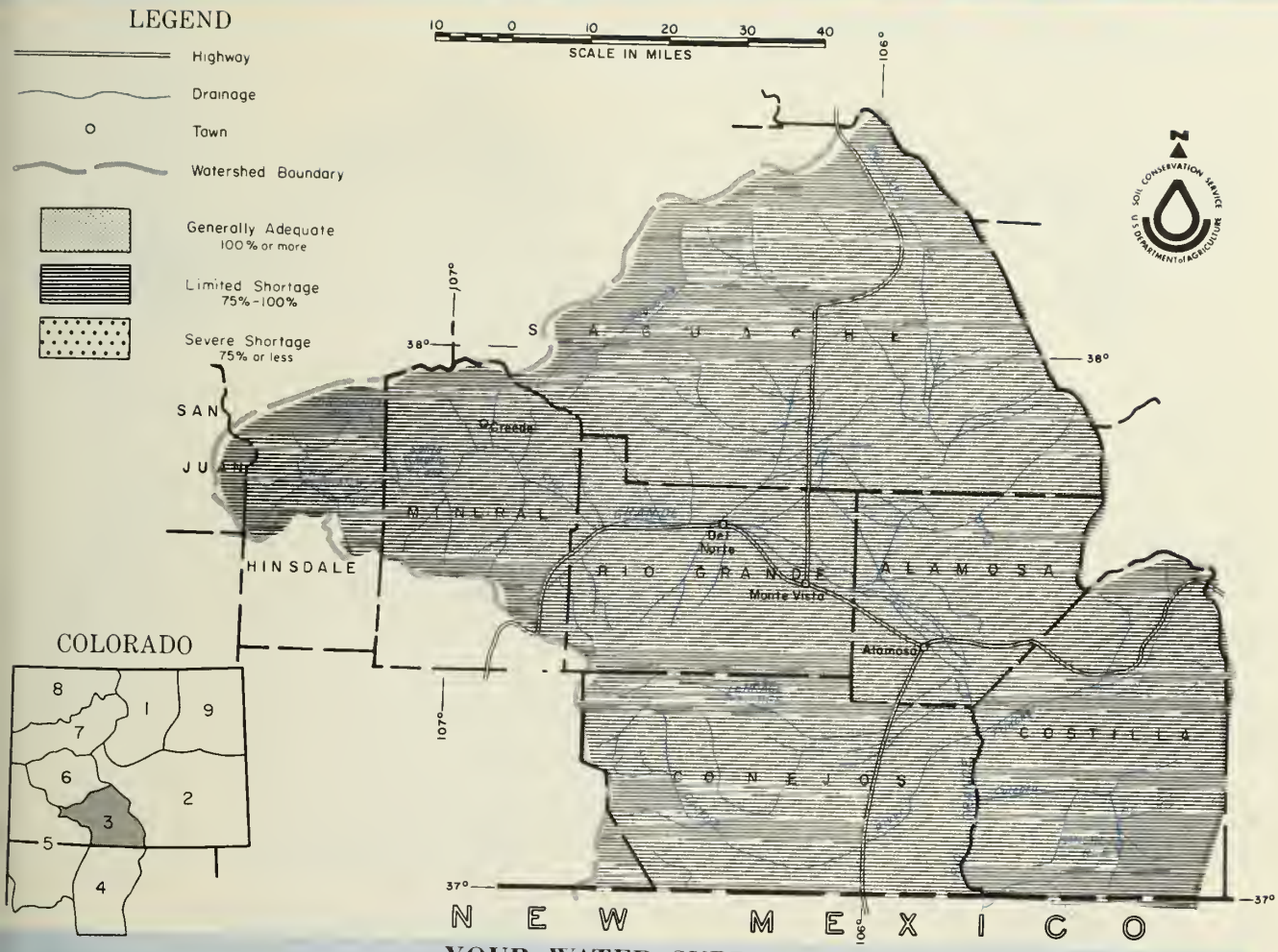
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE UPPER RIO GRANDE SNOWPACK FELL OFF SLIGHTLY DURING MARCH. NEARLY ALL THE SNOW COURSES ON THIS DRAINAGE INDICATE BELOW NORMAL SNOW, SOME AREAS INDICATE LESS THAN 80%. SUMMER FLOWS SHOULD BE IN THE 80% RANGE IF FUTURE SNOWFALL IS AT LEAST NORMAL. MOUNTAIN SOILS ARE DRIER THAN USUAL. VALLEY SOILS ARE IN FAIR CONDITION. CARRY-OVER STORAGE IS EXCELLENT AND WILL PROVIDE GOOD SUPPLEMENTAL SUPPLIES THIS SUMMER.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
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DENVER, COLORADO

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DENVER, COLORADO
ALAMOSA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Alamosa abv Terrace	50	81	62
Conejos nr Mogote (1)	170	92	184
Culebra at San Luis (2)	14	82	17
Rio Gr. at 30 Mile Bridge (3)	95	79	121
Rio Gr. nr Del Norte(3)	370	79	468
South Fork at South Fork	90	78	115

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Avg.	Fair
Sangre de Cristo Cr.	Avg.	Fair
Trinchera	Avg.	Fair

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change i storage in Sonta Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Alamosa	2	53	85
Conejos	3	62	93
Culebra	2	61	111
Rio Grande	10	55	80

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Alamosa	2	76	83
Conejos	1	115	90
Culebra	1	67	67
Rio Grande	3	86	85

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Continental	26.7	2.9	5.6	5.8
Platoro	60.0	35.8	2.9	8.7
Rio Grande	45.8	27.6	20.3	18.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Sanchez	103.2	15.8	5.8	13.6
Santa Maria	45.0	7.5	5.1	6.7
Terrace	17.7	9.7	6.5	5.9

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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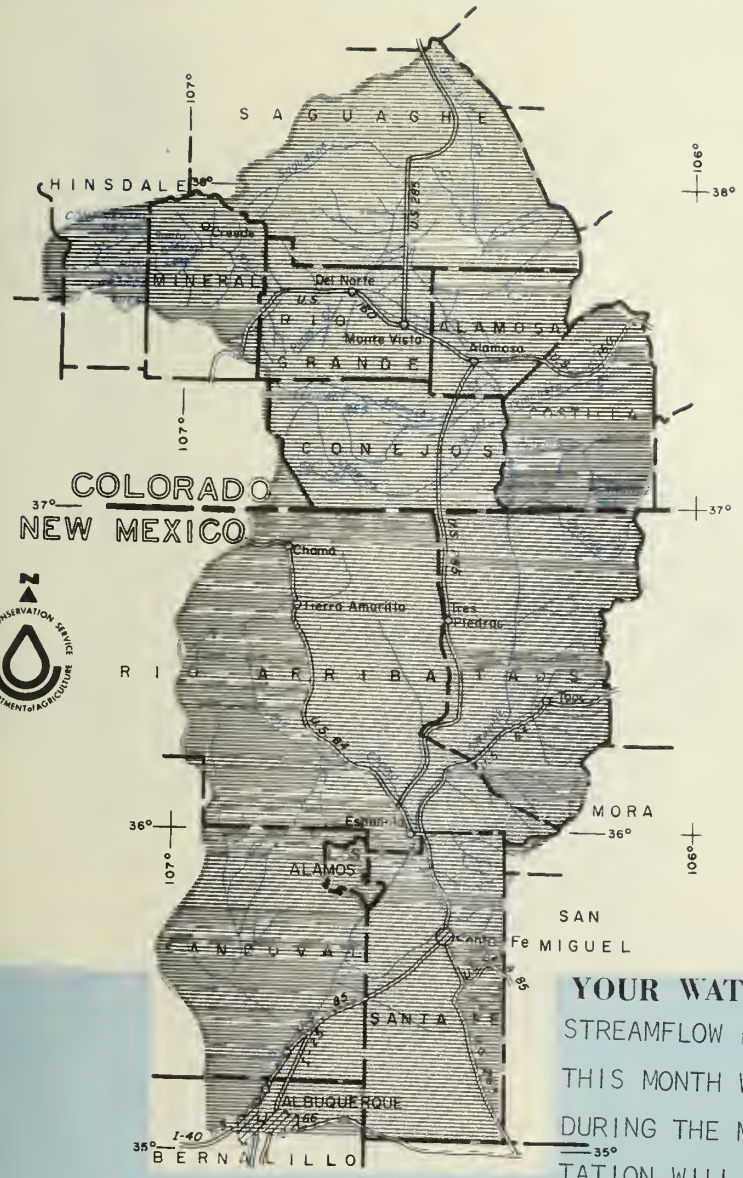

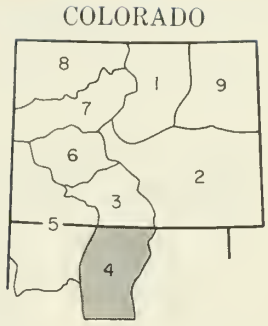

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

10 0 10 20 30 40
SCALE IN MILES

YOUR WATER SUPPLY

STREAMFLOW FORECASTS CONTINUE TO DECREASE THIS MONTH WITH BELOW AVERAGE SNOWFALL DURING THE MONTH. ABOVE AVERAGE PRECIPITATION WILL BE NECESSARY TO INSURE AVERAGE STREAMFLOWS THIS SEASON. RESERVOIR STORAGE IS MUCH ABOVE AVERAGE AND WILL BE A SUPPLEMENT TO THE WATER SUPPLY. ELEPHANT BUTTE CONTAINS 794,000 ACRE FEET COMPARED TO AN AVERAGE 394,000 ACRE FEET. CONCHAS CONTAINS 172,000 ACRE FEET COMPARED TO 184,000 ACRE FEET AVERAGE.

This report prepared by

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SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average +
Costilla at Cost. (1)	16	84	19
Jemez River nr Jemez	25	86	29
Pecos at Pecos	42	102	41
Rio Chama at El Vado	162	85	190
Rio Gr. at Otowi (2)	450	86	526
Rio Gr. at San Mar (2)	220	62	355
Rio Hondo nr Valdez	11	79	14
Red R. at Mouth nr Questa	27	93	29
Santa Cruz at Cundiyo	11	85	13

The forecast of the Rio Grande at San Marcial is 34 % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costilla Reservoir. (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Avg.	Fair
Mora River	Avg.	Fair
Nambe Creek	Avg.	Fair
Rio Ojo Caliante	Avg.	Fair
Rio Pueblo de Taos	Avg.	Fair
Santa Fe Creek	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Pecos	1	19	65
Rio Chama	5	41	83
Rio Grande, N.M.	12	41	92
Rio Hondo	--	--	--
Red River	2	57	98

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Pecos	1	--	77
Rio Chama	1	92	85
Rio Grande	3	--	50
Red River	2	--	50

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Alamorgordo	111	72	90	63
Caballo	344	70	84	65
Conchas	273	172	145	184
Elephant Butte	2195	794	373	394

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
El Vado	195	128	38	6
McMillen-Avalon	32	30	30	21
Heron	400	158	58	--

+ 1958-1972 period.

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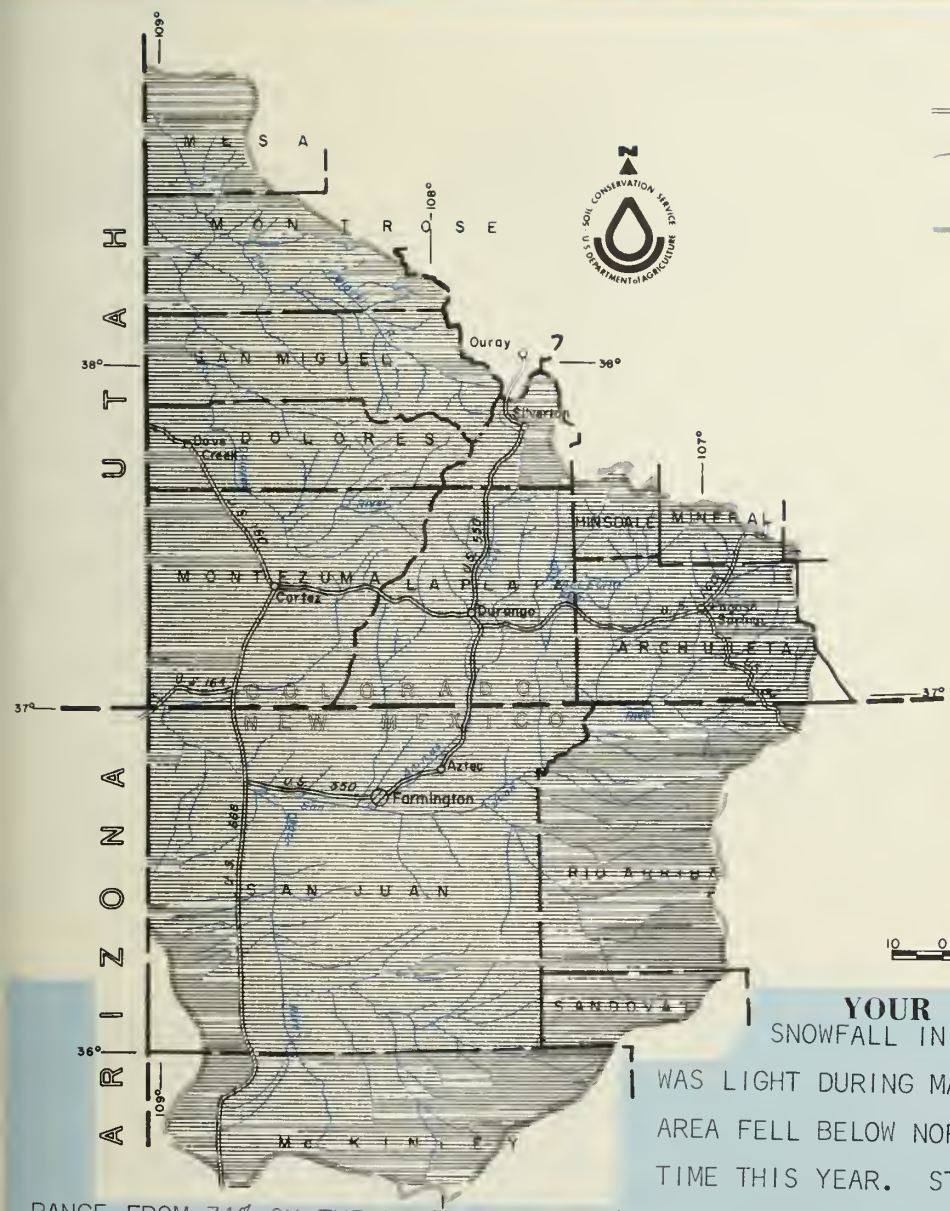
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of APRIL 1, 1974

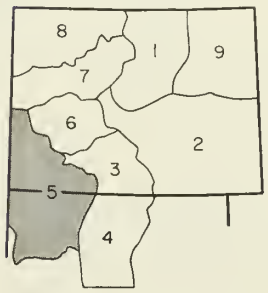
U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75% - 100%
- Severe Shortage 75% or less

COLORADO



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SCALE IN MILES

YOUR WATER SUPPLY

SNOWFALL IN THE SAN JUAN DRAINAGE WAS LIGHT DURING MARCH. MUCH OF THE AREA FELL BELOW NORMAL FOR THE FIRST TIME THIS YEAR. STREAMFLOW FORECASTS RANGE FROM 71% ON THE LA PLATA TO 84% ON THE SAN JUAN INFLOW TO NAVAJO. UNLESS APRIL AND MAY SNOWFALL IS GREATER THAN NORMAL SOME SHORTAGES WOULD OCCUR. NAVAJO RESERVOIR CONTAINS 985,000 A.F. SOIL MOISTURE IN THE IRRIGATED AREAS IS POOR TO FAIR.

This report prepared by
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R.L. PORTER --AREA CONSERVATIONIST · ALAMOSA, COLORADO
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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	320	76	423
Dolores at Dolores	180	78	232
La Plata at Hesperus	17	71	24
Los Pinos at Bayfield(1)	150	76	198
Piedra Cr. at Arboles	140	77	185
San Juan at Carracas	290	82	354
San Miguel at Placerville	100	77	130
Inflow to Navajo Rs. (1) (Apr-Jul)	500	84	597

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Avg.	Fair
Mancos	Avg.	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	72	98
Dolores	4	90	98
San Juan	5	61	89

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	79	82
Dolores	3	79	82
San Juan	3	79	82

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	15	7	10
Lemon	40	19	21	20
Navajo	1696	985	960	532
Vallecito	126	73	73	57
Narraguinnep		11	17	
Jackson Gulch	10	7	5	5

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average

+ 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE LOWERED THIS MONTH AS THE SNOWPACK DID NOT INCREASE AT THE AVERAGE RATE. FORECASTS ARE NOW 5 TO 10 PERCENT BELOW THE 1958-72 AVERAGE. LOW ELEVATION SNOW COURSES STILL HAVE ABOVE AVERAGE WATER CONTENT WHILE HIGH ELEVATION COURSES ARE NEAR AVERAGE. TOTAL RESERVOIR STORAGE IS SLIGHTLY BELOW LAST YEAR; HOWEVER, TAYLOR CONTAINS 63,000 ACRE FEET COMPARED TO 41,000 ACRE FEET LAST YEAR. SOIL MOISTURE CONDITIONS IN IRRIGATED AREAS ARE REPORTED AS GOOD.

This report prepared by
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GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Gunnison inflow to Blue Mesa (1)	720	91	793
Gunnison nr Grand Junction (2)	1125	95	1184
N. Fork of Gunnison(3)	240	91	263
Surface Creek nr Cedaredge	14	88	16
Uncompahgre at Colona	125	93	134

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Avg.	Avg.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Gunnison	12	91	101
Surface Creek	3	77	89
Uncompahgre	3	77	100

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Gunnison	1	117	142
Surface Creek	1	73	86
Uncompahgre	2	95	114

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Blue Mesa	830	262	308	315
Morrow Point	121	115	115	114
Taylor	106	63	41	65

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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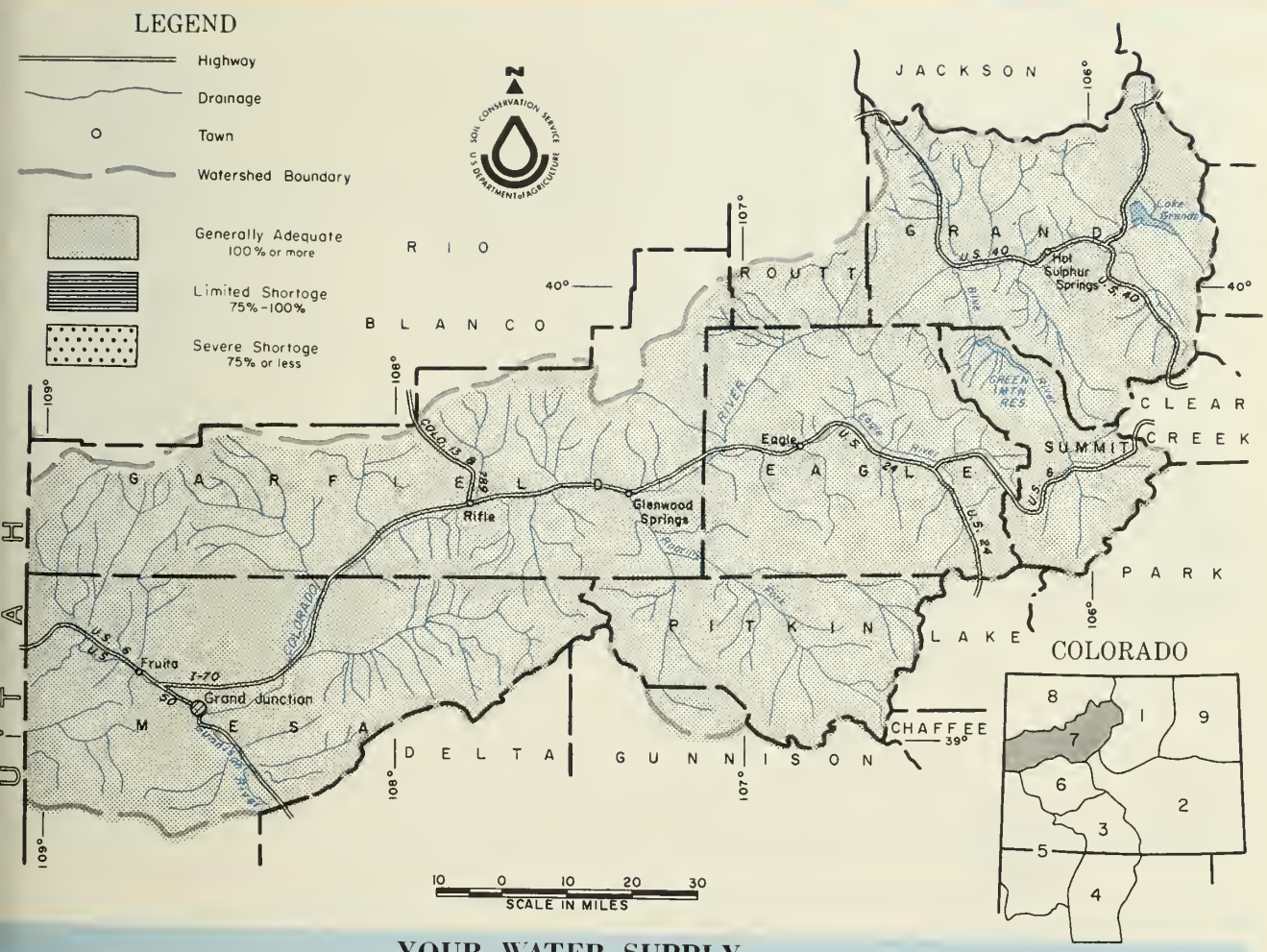

YOUR WATER SUPPLY

SNOW ON THE UPPER COLORADO RIVER DRAINAGE REMAINS NEAR NORMAL. THE HIGH SNOW IS ON THE WILLIAMS FORK AT 125% OF NORMAL AND THE LOW ON PLATEAU CREEK AT 91%. SUMMER FLOWS SHOULD BE REFLECTED BY THE SNOWPACK OR NEAR NORMAL. CARRY-OVER STORAGE IS ABOUT 114% OF THE 1958-72 PERIOD. MANY OF THESE RESERVOIRS PROVIDE WATER FOR THE EASTERN SLOPE OF THE MOUNTAINS. MOUNTAIN SOILS CONTAIN NEAR NORMAL MOISTURE. IF SNOWFALL REMAINS NEAR NORMAL, WATER SUPPLIES SHOULD BE ADEQUATE THIS SUMMER.

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AREA CONSERVATIONIST
GLENWOOD SPRINGS, COLORADO

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue inflow to Dillon	183	108	169
Blue inflow to Green Mountain (1)	320	108	297
Colo. R. inflow to Granby Res. (2)	225	99	228
Colo. R. nr Dotsero(3)	1400	98	1434
Roaring Fork at Glenwood Springs (4)	675	95	713
Wm. Fk. nr Parshall(5)	75	119	63
Willow Cr. inflow to Willow Cr. Res	54	115	47
Colorado nr Cameo (6)	2350	99	2370

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Avg.	Avg.
Eagle River	Avg.	Avg.
Gypsum Creek	Avg.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Gra as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Di and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plu in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	139	110
Colorado	22	131	114
Plateau	3	80	91
Roaring Fork	7	98	101
Williams Fork	3	134	125
Willow	2	150	114

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	109	100
Colorado	5	90	97
Roaring Fork	1	96	110
Willow	2	86	98

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	239	219	231
Granby	466	371	319	213
Green Mountain	147	54	66	54
Homestake	43	21	15	15

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	57	55	59
Vega	32	15	12	12
Williams Fork	97	42	53	25
Willow Creek	9	6	8	6

+ 1958-1972 period

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

THE HIGHEST SNOWPACK IN THE STATE IS IN THE NORTHERN THIRD, NAMELY YAMPA, SNAKE, AND PLATTE WATERSHEDS. HERE SNOWPACK IS ABOUT 125% OF THE 15 YEAR NORMAL. SEVERAL SNOW COURSES NEAR THE WYOMING STATE LINE ARE 150% OF NORMAL. IF SNOW CONTINUES TO FALL AT LEAST A NORMAL RATE, THERE SHOULD BE NO WATER SHORTAGES THIS SUMMER. STREAMFLOW FORECASTS ON THE LITTLE SNAKE INDICATE 140% OF NORMAL SUPPLIES. LOW ELEVATION SNOW IS ALSO GOOD. VALLEY SOILS ARE WET.

This report prepared by
JACK N. WASHICHEK and RONALD E. MORELAND
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by
M. O. BURDICK---STATE CONSERVATIONIST
DUANE L. JOHNSON --- AREA CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Elk at Clark	225	114	198
Laramie nr Woods	173	136	127
Little Snake at Lily	460	142	324
N. Platte at Northgate	370	154	240
White nr Meeker	290	98	295
Yampa nr Maybell	1080	119	905
Yampa at Steamboat Springs	320	117	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Elk	2	128	109
Laramie	3	123	117
North Platte	5	125	112
White	2	103	98
Yampa	6	135	119

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Laramie	2	109	114
North Platte	2	86	98
Yampa	1	86	129

+ 1958-1972 period.

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P.O. BOX 17107
DENVER, COLORADO 80217

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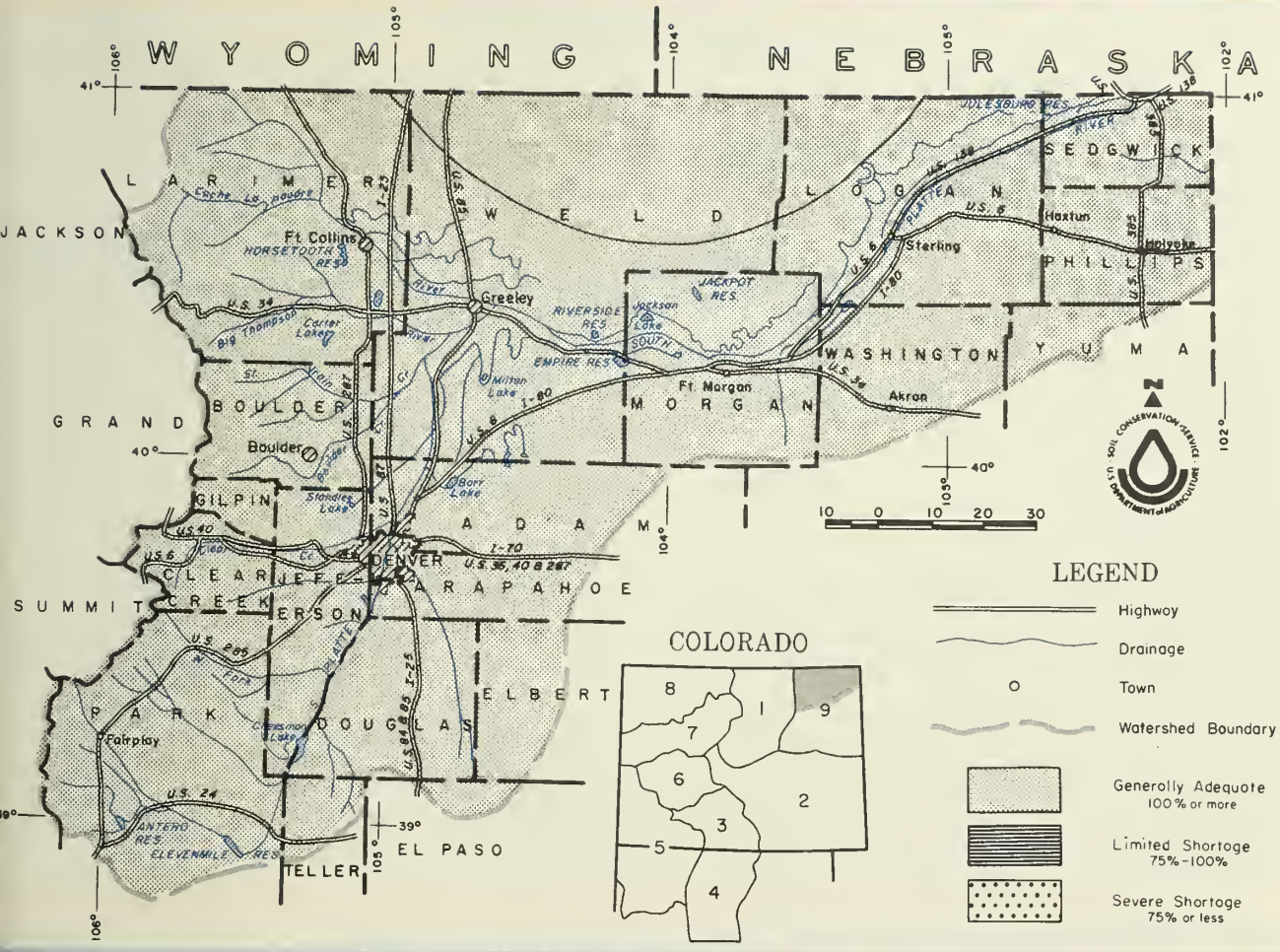
"The Conservation of Water begins with the Snow Survey"

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

APRIL 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES IN THE SOUTH PLATTE SHOULD BE NEAR AVERAGE DURING THE 1974 IRRIGATION SEASON IF SUCCEEDING MONTHS PRODUCE AT LEAST NORMAL PRECIPITATION. THE SNOWPACK ON THE UPPER PLATTE AND ITS NORTHERN TRIBUTARIES IS JUST ABOVE NORMAL. THE POOREST SNOW IS AT THE HEADWATERS OF THE SOUTH PLATTE. MOUNTAIN SOILS CONTAIN ABOUT NORMAL MOISTURE. REPORTS FROM THE IRRIGATED AREAS OF THE BASIN INDICATE NEAR NORMAL SOIL MOISTURE CONDITIONS. CARRY-OVER STORAGE IS JUST ABOUT NORMAL, BUT DOWN SLIGHTLY FROM LAST YEAR.

This report prepared by

JACK N. WASHICHEK and RONALD E. MORELANO
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DENVER, COLORADO

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO
STERLING, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	110	103	107
Boulder at Orodell	52	106	49
Cache La Poudre at Canyon Mouth (2)	245	99	247
Clear Cr. at Golden(3)	127	100	127
Saint Vrain at Lyons(4)	75	100	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Avg.	Fair
South Platte from Fort Morgan to Sterling	Avg.	Fair
South Platte below Sterling	Avg.	Fair

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow min diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	5	133	110
Boulder	3	143	114
Cache La Poudre	8	109	111
Clear Creek	6	141	108
Saint Vrain	3	143	109
South Platte	3	105	90

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	96	92
Boulder	1	100	86
Cache La Poudre	2	109	114
Clear Creek	2	99	103
Saint Vrain	3	96	92
South Platte	1	93	93

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	100.7	100.1	95.4
Cheesman	79.0	54.7	39.4	58.5
Eleven Mile	97.8	97.0	91.8	87.5
Empire	37.7	26.8	33.6	32.7
Horsetooth	143.5	121.1	105.4	110.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	32.7	33.7	33.9
Julesburg	28.2	19.8	23.1	21.8
Point of Rocks	70.0	69.8	70.0	65.7
Prewitt	32.8	26.3	27.9	22.6
Riverside	57.5	57.5	57.9	58.0

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of April 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	3/26	58	18.7	14.3	16.8
McIntyre	3/29	39	12.2	12.3	10.8
Roach	3/29	67	22.8	17.0	18.2
North Platte River					
Cameron Pass	3/28	80	30.8	27.8	28.7
Columbine Lodge	3/28	72	27.6	17.3	24.0
Northgate	3/28	25	8.0	8.5	6.5
Park View	3/26	35	10.8	8.8	9.2
Willow Cr. Pass (B)	3/26	41	13.8	10.5	12.7
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	3/28	31	8.7	7.4	6.8
Boulder Falls	3/28	48	15.5	10.0	13.4
University Camp	3/28	63	21.0	14.1	19.3
Big Thompson River					
Deer Ridge	3/29	17	4.8	5.0	4.8
Hidden Valley	3/29	37	10.2	8.4	10.5
Lake Irene (B)	3/31	70	22.8	17.8	20.9
Long's Peak	3/28	43	13.2	7.1	10.9
Two Mile	3/29	54	15.5	11.6	15.1
Cache La Poudre					
Bennett Creek	3/27	32	9.8	8.6	---
Big South	3/28	0	0.0	3.1	2.1
Cameron Pass	3/28	80	30.8	27.8	28.7
Chambers Lake	3/28	28	10.8	9.6	9.6
Deadman Hill	3/26	58	18.7	14.3	16.8
Hourglass Lake	3/27	35	10.0	7.5	6.7
Joe Wright	3/28	74	26.5	23.6	---
Lost Lake	3/28	40	13.1	10.7	11.8
Pine Creek	3/26	6	1.6	4.3	1.9
Red Feather	3/26	28	9.0	9.1	6.9
Clear Creek					
Baltimore (B)	3/28	31	8.7	7.4	6.8
Berthoud Falls	3/28	50	16.4	11.7	13.6
Empire	3/28	35	9.9	5.6	7.8
Grizzly Peak (B)	3/28	60	19.2	12.2	18.9
Loveland Lift	3/29	62	17.3	15.0	21.1
Loveland Pass	3/29	63	18.8	12.0	15.7
Saint Vrain River					
Copeland Lake	3/30	13	4.2	4.2	4.4
Ward	3/27	25	6.5	5.4	6.5
Wild Basin	3/30	44	13.3	7.2	11.2
South Platte River					
Como	3/28	19	5.2	7.3	---
Geneva Park	3/27	13	3.1	4.0	3.8
Horseshoe Mt.	3/27	36	9.8	8.7	---
Hoosier Pass	3/29	47	13.0	10.5	12.9
Jefferson Creek	3/28	26	7.1	7.6	9.2
Mosquito	3/28	25	8.3	9.0	---
Trout Creek Pass	3/27	21	5.5	6.5	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	3/26	35	10.8	7.2	6.5
Cooper Hill (B)	4/01	48	14.1	9.6	11.3
East Fork	3/26	36	11.3	7.5	9.8
Four Mile Park	3/29	17	5.3	5.0	5.1
Fremont Pass	3/26	58	17.5	13.3	16.2
Garfield	3/25	41	14.5	15.8	13.0
Hermit Lake	3/27	25	9.6	9.8	---
Monarch Pass	3/25	52	18.4	17.9	17.1
Twin Lakes Tunnel	3/28	35	11.6	9.9	10.7
Westcliffe	3/27	23	9.0	8.5	6.3
Tennessee Pass	3/29	33	9.7	8.2	10.6

NOTE: NS - No Survey
(B) - On Adjacent Drainage

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG. 58-72
Cucharas River					
Blue Lakes	NS			6.2	---
Cucharas Pass	3/28	25	10.2	10.0	---
LaVeta Pass (B)	3/28	28	10.3	13.2	7.4
Purgatoire River					
Bourbon	3/27	24	7.6	9.3	7.0
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	3/29	6	1.7	11.4	5.3
Summitville	3/27	59	18.5	26.6	18.6
Conejos River					
Cumbres	3/26	48	19.3	27.3	18.0
LaManga	3/26	52	18.4	24.2	---
Platoro	3/30	38	13.7	22.0	16.3
River Springs	3/28	8	3.0	9.2	4.6
Culebra River					
Brown Cabin	3/30	15	4.1	9.0	---
Cottonwood (B)				---	---
Culebra	3/22	23	7.2	15.4	8.4
LaVeta Pass (B)	3/28	28	10.3	13.2	7.4
Trinchera (B)	3/29	25	7.4	13.5	---
Rio Grande					
Cochetopa Pass	3/26	24	6.8	7.6	5.9
Grayback	3/26	46	15.6	21.7	---
Hiway	3/28	56	20.6	33.0	23.8
Lake Humphrey	3/28	15	3.8	10.7	6.1
Love Lake	3/27	23	6.3	15.2	---
Pass Creek	3/28	24	9.5	17.8	9.8
Pool Table	3/28	16	4.0	8.7	6.1
Porcupine	3/29	24	6.3	12.0	10.5
Santa Maria	3/28	6	1.5	6.6	3.6
Upper Rio Grande	3/28	16	4.6	13.8	7.5
Wolf Creek Pass	3/28	55	22.6	35.1	25.5
Wolf Cr. Summit (B)	3/28	71	25.8	39.7	28.3
RIO GRANDE BASIN - NM					
Pecos River					
Panchuela	3/28	3	1.3	6.9	2.0
Rio Chama					
Bateman	3/28	30	10.2	17.8	11.7
Capulin	3/28	6	2.0	8.3	2.7
Capulin Peak	3/28	8	3.0	9.0	3.4
Chama Divide	3/27	0	0.0	5.6	1.7
Chamita	3/27	17	6.9	12.7	7.2
Rio Grande					
Big Tesuque	3/26	13	4.5	12.7	4.6
Blue Bird Mesa	3/27	4	1.1	9.5	3.5
Cordova	3/27	30	9.7	17.4	10.1
Elk Cabin	3/28	8	4.3	7.8	2.5
Hopewell	3/27	46	17.7	22.1	---
LaCueva	3/29	11	4.1	10.7	---
Pajarito	3/28	0	0.0	1.0	0.0
Pajarito Peak	3/28	0	0.0	2.8	0.3
Payrole	3/28	15	6.3	12.2	6.8
Quemazon	3/27	28	9.3	20.7	9.0
Rio En Medio	3/26	27	9.7	16.7	7.4
Sandoval	3/27	10	3.6	14.6	4.2
Taos Canyon	3/26	14	4.3	8.4	3.9
Teakettle	3/27	23	8.1	13.0	---
Tres Ritos	3/27	7	2.2	11.1	4.8
Rio Hondo					
Taos Powderhorn	3/27	55	19.8	---	---
Red River					
Hematite Park (B)	3/25	10	2.9	7.1	3.5
Red River	3/25	19	6.0	8.6	5.6
Red River #2	3/25	13	4.7	9.3	---

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SAN JUAN-DOLORES BASIN					
Animas River					
Cascade	3/27	22	8.1	19.1	10.2
Lemon	3/28	11	4.1	15.7	---
Mineral Creek	3/27	36	11.8	19.9	15.4
Molas Lake	3/27	31	10.7	16.3	12.6
Purgatory	3/27	41	13.9	31.8	---
Red Mt. Pass (B)	3/27	69	25.3	35.1	31.5
Silverton Sub-Sta.	3/27	15	5.5	13.0	5.2
Spud Mountain	3/27	47	16.8	30.8	23.1
Dolores River					
Lizard Head	3/28	46	16.3	22.4	17.2
Lone Cone	3/29	43	16.8	18.9	---
Rico	3/28	10	4.4	13.1	6.1
Telluride	3/28	19	7.3	10.6	6.5
Trout Lake	3/28	40	14.5	19.5	13.7
San Juan River					
Chama Divide (B)	3/27	0	0.0	5.6	1.7
Chamita (B)	3/27	17	6.9	13.0	7.2
Upper San Juan	3/28	62	26.1	40.3	28.6
Wolf Cr. Pass (B)	3/28	55	22.6	35.1	25.5
Wolf Cr. Summit	3/28	71	25.8	39.7	28.3
GUNNISON BASIN					
Gunnison River					
Alexander Lake	3/27	53	19.2	26.5	22.8
Blue Mesa	3/28	25	8.6	7.6	7.2
Butte	3/28	47	15.6	13.4	---
Cochetopa Pass (B)	3/26	24	6.8	7.6	5.9
Crested Butte	3/28	42	16.2	14.1	13.0
Keystone	3/28	56	21.1	19.8	20.0
Lake City	3/25	28	8.0	7.9	8.0
Mesa Lakes (B)	3/29	45	16.1	20.4	17.6
McClure Pass	3/29	37	13.9	19.2	15.1
Park Cone	3/26	33	9.7	8.5	10.6
Park Reservoir	3/28	56	21.6	27.3	23.8
Porphyry Creek	3/25	51	18.4	18.7	16.9
Tomichi	3/25	42	15.4	14.6	12.6
Surface Creek					
Alexander Lake	3/27	53	19.2	26.5	22.8
Mesa Lakes (B)	3/29	45	16.1	20.4	17.6
Park Reservoir	3/28	56	21.6	27.3	23.8
Uncompahgre River					
Ironton Park	3/28	40	15.6	16.9	10.2
Red Mountain Pass	3/27	69	25.3	35.1	31.5
Telluride (B)	3/28	19	7.3	10.6	6.5
COLORADO BASIN					
Blue River					
Blue River	3/29	37	9.4	8.5	8.5
Fremont Pass	3/26	58	17.5	13.3	16.2
Frisco	3/28	26	7.4	6.3	7.4
Grizzly Peak	3/28	60	19.2	12.2	18.9
Hoosier Pass (B)	3/29	47	13.0	10.5	12.9
Shrine Pass	3/28	63	20.6	14.7	18.1
Snake River	3/28	30	10.0	5.2	7.9
Summit Ranch	3/27	30	9.5	6.1	7.1
Colorado River					
Arrow	3/28	55	17.8	12.6	13.2
Berthoud Pass	3/27	64	21.0	14.4	15.9
Berthoud Summit	3/28	69	21.5	16.3	19.7
Cooper Hill	4/01	48	14.1	9.6	11.3
Fiddler Gulch	3/27	50	15.0	11.3	14.5
Glenmar Ranch	3/26	37	11.7	7.8	8.5
Gore Pass	3/27	31	10.3	9.3	10.2
Grand Lake	3/31	36	10.0	7.5	8.2
Lake Irene	3/31	70	22.8	17.8	20.9
Lapland	3/26	44	12.8	8.3	10.4
Lulu	3/28	66	22.9	16.4	18.7
Lynx Pass	3/27	40	12.7	12.1	12.8
McKenzie Gulch	3/28	19	5.8	6.2	5.0
Middle Fork	3/26	40	11.6	9.4	9.9
Milner	3/31	47	13.7	10.6	13.6
North Inlet	3/31	31	8.7	7.9	8.7
Pando	3/26	34	10.3	8.8	10.3
Phantom Valley	3/31	35	9.3	9.3	10.8
Ranch Creek	3/28	43	13.5	9.3	9.9
Tennessee Pass (B)	3/29	33	9.7	8.2	10.6
Vail Pass	3/28	59	19.8	14.0	17.3
Vasquez	3/28	54	16.4	10.6	12.9
Roaring Fork River					
Aspen	3/29	39	19.9	17.7	17.1
Independence Pass	3/28	47	14.0	14.3	17.5
Ivanhoe	3/28	63	22.4	18.0	18.1
Kiln	3/28	49	16.8	10.5	---
Lift	3/29	48	16.0	17.0	17.8
McClure Pass	3/29	37	15.0	19.2	15.1
Nast	3/28	23	8.0	6.3	5.6
North Lost Trail	3/29	28	12.4	16.2	14.6
Williams Fork River					
Glenmar Ranch	3/26	37	11.7	7.8	8.5
Jones Pass	3/27	60	19.1	14.4	15.5
Middle Fork	3/26	40	11.6	9.4	9.9
Willow Creek					
Granby	3/26	26	9.2	4.8	7.5
Willow Cr. Pass	3/26	41	13.8	10.5	12.7
Plateau Creek					
Mesa Lakes	3/29	45	16.1	20.4	17.6
Park Reservoir	3/28	56	21.6	27.3	23.8
Trickle Divide	3/28	61	23.8	29.0	25.9
YAMPA BASIN					
Elk River					
Elk River	3/28	53	19.3	14.7	17.8
Hahn's Peak	3/28	41	15.1	12.2	13.7
White River					
Burro Mountain	3/28	42	15.5	18.9	17.2
Rio Blanco	3/27	45	17.0	12.6	15.7
Yampa River					
Bear River	3/27	41	11.9	9.5	11.2
Buffalo Pass	3/26	128	49.6	36.3	---
Columbine (B)	3/28	72	27.6	17.3	24.0
Crosho	3/27	49	15.4	12.6	---
Dry Lake	3/26	65	24.6	19.0	20.0
Lynx Pass (B)	3/27	40	12.7	12.1	12.8
Rabbit Ears	3/28	84	31.9	22.8	25.9
Yampa View	3/28	49	20.0	14.7	14.6

NOTE: NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	3/29/74	11.1	7.6	7.9	6.6
Willow Pass	4/01/74	9.5	5.4	7.2	6.7
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	3/21/74	6.9	3.2	3.2	3.7
Big Thompson River					
Beaver Dam	3/21/74	7.1	3.4	3.3	3.5
Guard Station	3/21/74	6.9	3.0	3.4	3.6
Two Mile	3/21/74	4.9	4.6	4.8	4.8
Clear Creek					
Clear Creek	3/27/74	9.5	5.6	5.2	5.4
Hoop Creek	3/27/74	4.9	2.6	3.1	2.6
Cache La Poudre River					
Feather	3/26/74	10.1	5.7	4.8	4.5
Laramie Road	3/28/74	12.4	7.3	7.1	6.9
South Platte River					
Hoosier Pass	3/29/74	7.8	4.1	4.4	4.4
Kenosha Pass	NR	4.4	---	2.2	2.2
ARKANSAS BASIN					
Arkansas River					
Garfield	3/25/74	6.7	4.9	4.6	3.6
Leadville	3/26/74	7.8	3.6	3.6	3.6
Twin Lakes Tunnel	3/26/74	4.5	2.6	2.5	2.3
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	3/25/74	10.7	5.5	4.8	6.1
Rio Grande					
Bristol View	3/27/74	6.1	4.4	4.9	3.6
LaVeta Pass	3/25/74	11.9	5.8	8.6	8.7
RIO GRANDE BASIN - NEW MEXICO					
Rio Chama					
Bateman	3/28/74	6.7	1.8	---	3.1
Chamita	3/27/74	8.0	4.6	5.0	5.4
Rio Grande					
Aqua Piedra	3/27/74	7.2	1.4	---	4.5
Big Tesuque	3/27/74	3.7	1.7	---	2.2
Rio En Medio	3/27/74	3.5	0.4	---	1.4
Taos Canyon	3/26/74	3.3	2.3	---	2.3
Red River					
Red Summit	3/25/74	4.9	2.4	---	---

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of April 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
ANIMAS - SAN JUAN BASINS					
Animas River					
Cascade	3/27/74	9.1	3.6	5.1	6.0
Mineral Creek	3/27/74	5.7	3.2	3.0	3.2
Molas Lake	3/27/74	9.4	4.1	5.7	4.1
Dolores River					
Dolores	NR	19.6	---	18.2	8.6
Lizard Head	NR	11.8	---	2.5	5.4
Rico	NR	13.8	---	8.2	8.8
GUNNISON BASIN					
Gunnison River					
King	3/25/74	3.3	2.7	2.3	1.9
COLORADO BASIN (Mainstem)					
Blue River					
Blue River	3/29/74	4.2	2.5	2.3	2.5
Colorado River					
Berthoud Pass	3/27/74	3.9	2.7	3.2	2.6
Gore	4/01/74	4.9	2.5	2.7	2.7
Grand Mesa	3/28/74	12.5	8.5	11.6	9.9
Ranch Creek	3/29/74	8.7	6.5	5.7	5.3
Vail	3/27/74	12.3	8.0	8.0	8.5
Roaring Fork River					
Placita	3/29/74	9.3	7.4	7.7	6.7
YAMPA BASIN					
Yampa River					
Hahn's Peak	3/28/74	13.1	10.1	11.7	7.8

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

AS OF
MAY 1, 1974

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idoho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA SCS PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Collins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Mosca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes water supply conditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditions in DeBeque, Plateau Valley, Lower Grand Valley, Bookcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditions in Yampa, Moffat, West Routt, East Routt, North Park, White River, and Douglas Creek Soil Conservation Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rock Creek, and Yuma Soil Conservation Districts.

APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

WATER SUPPLY OUTLOOK

as of

MAY 1, 1974

GENERALLY ADEQUATE
100% OR MORE

LIMITED SHORTAGE
75% - 100%

SEVERE SHORTAGE
75% OR LESS

The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS
as of
MAY 1, 1974

THE SNOWPACK OVER THE TWO STATES IS EXTREMELY HIGH IN NORTHERN COLORADO AND GRADUALLY DECREASES TO THE SOUTH. SOUTHERN COLORADO AND NORTHERN NEW MEXICO COULD EXPERIENCE SOME WATER SHORTAGE THIS SUMMER. THE NORTHERN PORTION OF COLORADO COULD EXPERIENCE SOME HIGH WATER IF THE SPRING TEMPERATURES ARE UNSEASONABLY WARM OR THE AREA RECEIVES RAIN ON THE LOW ELEVATION SNOWPACK. CARRY-OVER STORAGE IN THE TWO STATES IS AVERAGE TO SLIGHTLY ABOVE. FORECASTS ARE BASED ON AVERAGE PRECIPITATION DURING THE REMAINDER OF THE YEAR.

COLORADO

HEAVY SNOWFALL IN THE NORTHERN PORTION OF THE STATE HAS INCREASED THE STREAMFLOW FORECASTS THIS MONTH FROM 5 TO 25%. AREAS IN NORTHWEST COLORADO HAVE EXPERIENCED HIGH WATER BECAUSE OF THE LARGE AMOUNT OF LOW ELEVATION SNOW, WARM TEMPERATURES AND RAINFALL. CONTINUED WARM TEMPERATURES COULD RESULT IN MORE HIGH WATER. STREAMS IN THE CENTRAL PART OF THE STATE ARE FORECAST AT 75 TO 85%. WATER SUPPLIES MAY BE SHORT IN THESE AREAS UNLESS ABOVE AVERAGE RAINFALL OCCURS DURING THE REMAINDER OF THE SEASON. CARRY-OVER STORAGE IS GOOD THROUGHOUT THE STATE. HOWEVER, JOHN MARTIN RESERVOIR IS EMPTY

NEW MEXICO

STREAMFLOW FORECASTS IN NEW MEXICO HAVE REDUCED SLIGHTLY. ONLY A FEW SNOW COURSES ARE READ MAY 1st AS MOST ARE VOID OF SNOW. CARRY-OVER RESERVOIR STORAGE IS GOOD WITH ELEPHANT BUTTE CONTAINING 719,000 ACRE FEET COMPARED TO 385,000 LAST YEAR. FIVE OTHER RESERVOIRS CONTAIN 143% OF THE 1958-72 AVERAGE. THIS WILL SUPPLEMENT STREAMFLOW FOR IRRIGATION NEEDS. SOIL MOISTURE CONDITIONS ARE REPORTED AS POOR.

WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
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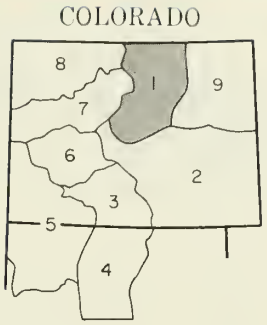

LEGEND

- Highway
- Drainage
- Town
- Watershed Boundary
- Generally Adequate 100% or more
- Limited Shortage 75%-100%
- Severe Shortage 75% or less

YOUR WATER SUPPLY

HEAVY SNOWFALL OCCURRED IN THE HEADWATERS OF MOST SOUTH PLATTE TRIBUTARIES DURING THE MONTH. THEREFORE STREAMFLOW FORECASTS WERE INCREASED FROM LAST MONTH ON MOST STREAMS. THE LARGEST INCREASE IS ON CLEAR CREEK AND THE CACHE LA POUDRE. FORECASTS NOW RANGE FROM 100% ON ST. VRAIN TO 122% ON CLEAR CREEK. RESERVOIR STORAGE IS NEAR LAST YEAR AND 111% OF THE 1958-72 AVERAGE. THE BIG THOMPSON STORAGE IS 140% OF AVERAGE AND DENVER WATER BOARD IS 109%. SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD.

This report prepared by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Big Thompson at Drake(1)	112	105	107
Boulder at Orodell	55	112	49
Cache La Poudre at Canyon Mouth (2)	265	107	247
Clear Creek at Golden(3)	155	122	127
St. Vrain at Lyons (4)	75	100	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Bear Creek	Exc.	Avg.
Coal Creek	Exc.	Avg.
North Fork of South Platte	Exc.	Avg.
North Fork of Cache La Poudre	Exc.	Avg.
Ralston Creek	Exc.	Avg.
Rock Creek	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Big Thompson	4	102	107
Boulder	3	98	125
Cache La Poudre	8	84	127
Clear Creek	6	125	130
Saint Vrain	3	64	90
South Platte	3	86	93

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Big Thompson	3	113	90
Boulder	1	63	72
Cache La Poudre	2	120	90
Clear Creek	2	97	93
Saint Vrain	3	113	90
South Platte	2	96	84

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Antero	33.0	15.9	15.9	13.7
Barr Lake	32.2	25.5	28.0	26.0
Black Hollow	8.0	4.7	4.5	4.2
Boyd Lake	44.0	44.1	37.5	37.9
Cache La Poudre	9.5	8.3	8.8	8.8
Carter Lake	108.9	107.0	102.8	98.5
Chambers Lake	8.8	4.5	5.0	3.6
Cheesman	79.0	67.5	56.5	60.2
Cobb Lake	34.3	19.1	20.1	15.0
Eleven Mile	97.8	94.5	91.7	89.1
Fossil Creek	11.6	9.5	10.3	8.3
Gross	43.1	25.8	19.7	22.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Halligan	6.4	6.4	6.4	6.0
Horsetooth	143.5	125.6	21.2	121.2
Lake Loveland	14.3	12.7	10.9	10.2
Lone Tree	9.2	7.9	8.9	7.6
Mariano	5.4	5.8	5.7	5.4
Marshall	10.3	---	5.6	5.8
Marston	18.0	16.6	16.5	16.1
Milton	24.4	17.4	18.1	15.0
Standley	42.0	---	28.1	20.0
Terry Lake	8.2	5.8	6.3	5.8
Union	12.7	12.7	10.9	10.0
Windsor	18.6	12.8	14.8	12.5

† 1958-1972 Period.

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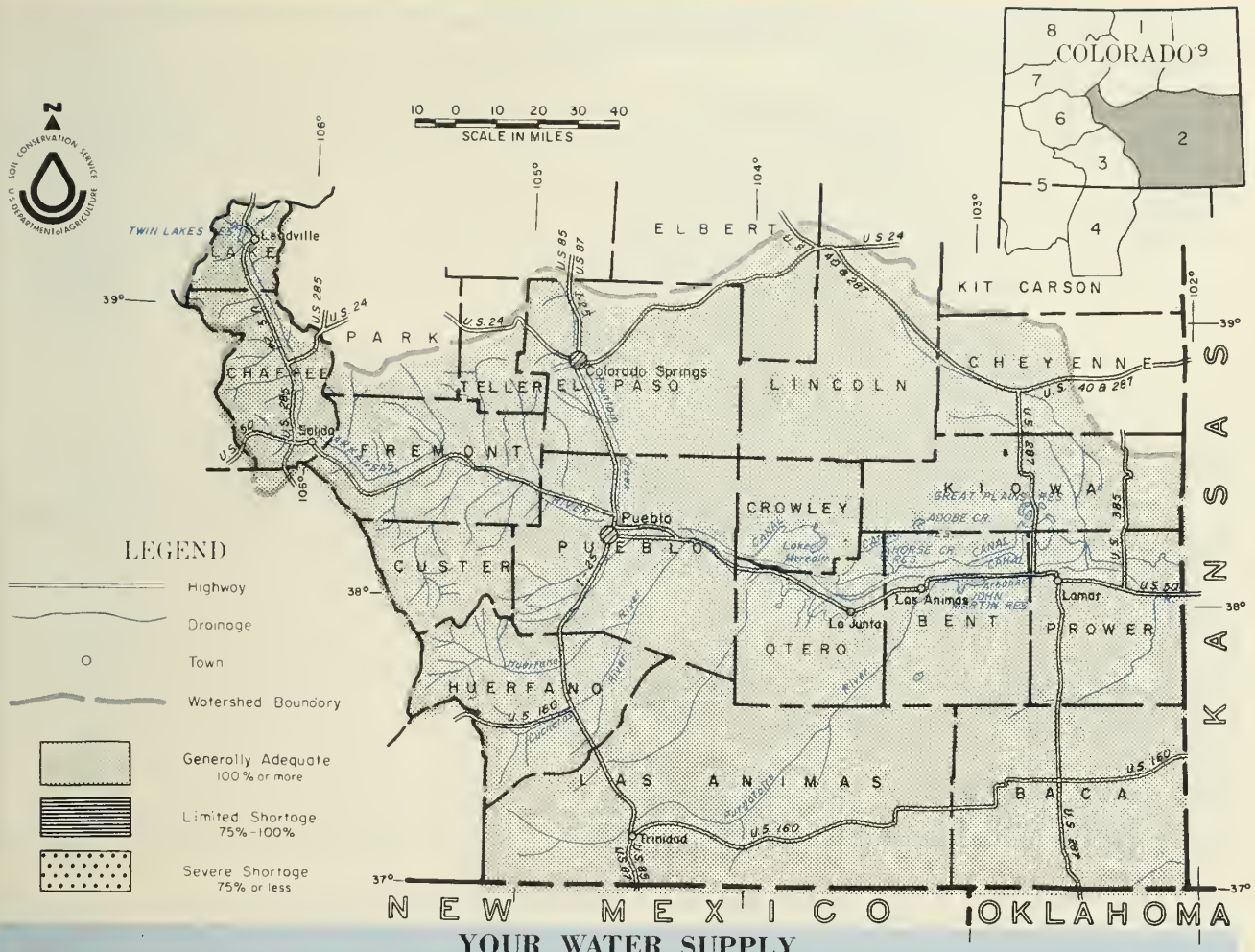
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
ARKANSAS RIVER WATERSHED IN COLORADO

as of

MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS FOR THE SEASON ARE SLIGHTLY BELOW AVERAGE FOR THE ARKANSAS AND ITS TRIBUTARIES. FORECASTS RANGE FROM 96% OF AVERAGE ON ARKANSAS RIVER AT SALIDA TO 83% ON THE PURGATOIRE. RESERVOIR STORAGE IS 110% OF AVERAGE AND 134% OF LAST YEAR. TURQUOISE CONTAINS 51,500 ACRE FEET, ABOUT SAME AS LAST YEAR WHILE JOHN MARTIN IS EMPTY. SOIL MOISTURE IN IRRIGATED AREAS IS REPORTED AS FAIR TO GOOD. AVERAGE PRECIPITATION OR ABOVE IS NEEDED THE REMAINDER OF THE SEASON TO ASSURE AN AVERAGE STREAMFLOW.

This report prepared by
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DENVER, COLORADO — ALAMOSA, COLORADO — LA JUNTA, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Arkansas nr Pueblo (1)	275	95	290
Arkansas nr Salida (1)	300	96	313
Cucharas nr La Veta	9	90	10
Purgatoire at Trinidad	30	83	38

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Apishapa	Avg.	Fair
Fountain Creek	Avg.	Fair
Grape	Avg.	Fair
Hardscrable	Avg.	Fair
Huerfano	Avg.	Fair
Monument Creek	Avg.	Fair

(1) Observed flow plus change in Clear Creek, Twin Lakes and Turquoise Reservoirs minus diversions through Busk Ivanhoe, Boustead, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Poss, Wurtz and Columbine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Arkansas	9	84	118
Cucharas	2	--	--
Purgatoire	1	0	16

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Arkansas	3	98	104
Cucharas and Purgatoire	2	106	97

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Adobe	61.6	19.0	0.0	15.5
Clear Creek	11.4	3.5	7.8	7.9
Cucharas	40.0	6.4	0.0	3.0
Great Plains	150.0	50.4	48.2	57.2
Horse Creek	26.9	0.0	0.0	6.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
John Martin	353.9	0.0	40.9	72.8
Meredith	41.9	25.6	22.6	13.0
Model	15.0	---	---	2.9
Turquoise	120.5	51.5	50.7	---
Twin Lakes	57.9	36.0	26.9	21.7

+ 1958-1972 period.

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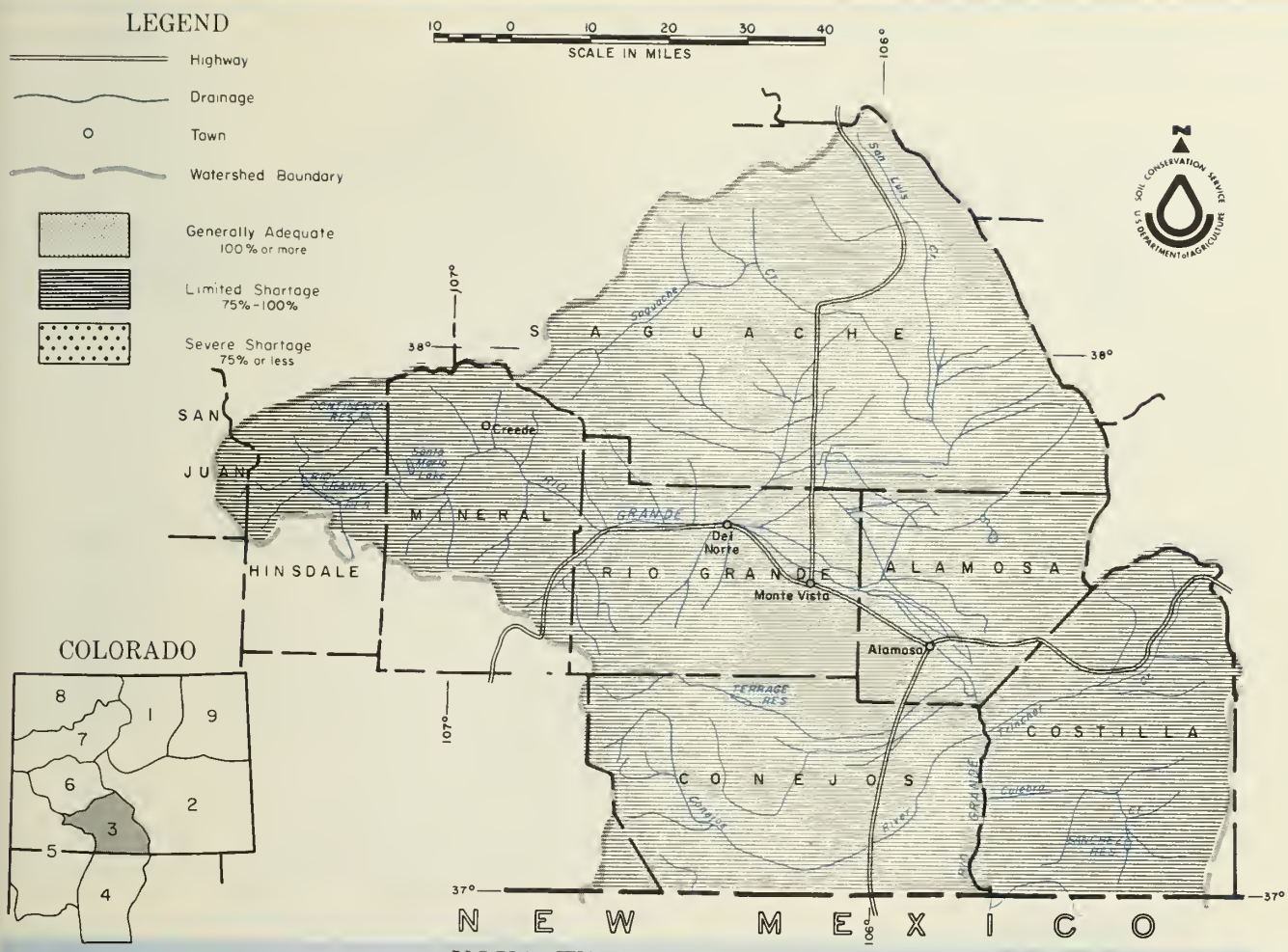
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
UPPER RIO GRANDE WATERSHED IN COLORADO
as of

MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
CSU EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS REMAIN ABOUT THE SAME AS LAST MONTH AND RANGE FROM 74% TO 84% OF THE 1958-72 AVERAGE. ABOVE AVERAGE PRECIPITATION WILL BE NEEDED TO ASSURE AVERAGE STREAMFLOW. RESERVOIR STORAGE IS ABOUT 163% OF AVERAGE AND WILL BE AN EXCELLENT SUPPLEMENT FOR IRRIGATION DEMANDS. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS POOR TO FAIR.

This report prepared by
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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Alamosa abv Terrace	49	79	62
Conejos nr Mogote (1)	153	83	184
Culebra at San Luis (2)	13	76	17
Rio Grande at 30 Mile Bridge (3)	95	78	121
Rio Gr. nr Del Norte(3)	350	75	468
South Fork at South Fork	55	74	115

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Saguache Creek	Fair	Fair
Sangre de Cristo Cr.	Fair	Fair
Trinchera	Fair	Fair

(1) Observed flow plus change in storage in Platoro Reservoir. (2) Observed flow plus change in storage in Sanchez Reservoir. (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Alamosa	2	50	97
Conejos	3	38	82
Culebra	2	16	83
Rio Grande	10	40	75

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †
Alamosa	1	131	96
Conejos	1	131	96
Culebra	1	107	91
Rio Grande	3	114	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Continental	26.7	3.6	6.1	6.6
Platoro	60.0	35.0	2.9	10.0
Rio Grande	45.8	28.5	21.0	20.3

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Sanchez	103.2	---	---	14.5
Santa Maria	45.0	7.9	5.8	7.5
Terrace	17.7	10.1	6.8	7.2

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
RIO GRANDE WATERSHED IN NEW MEXICO
as of

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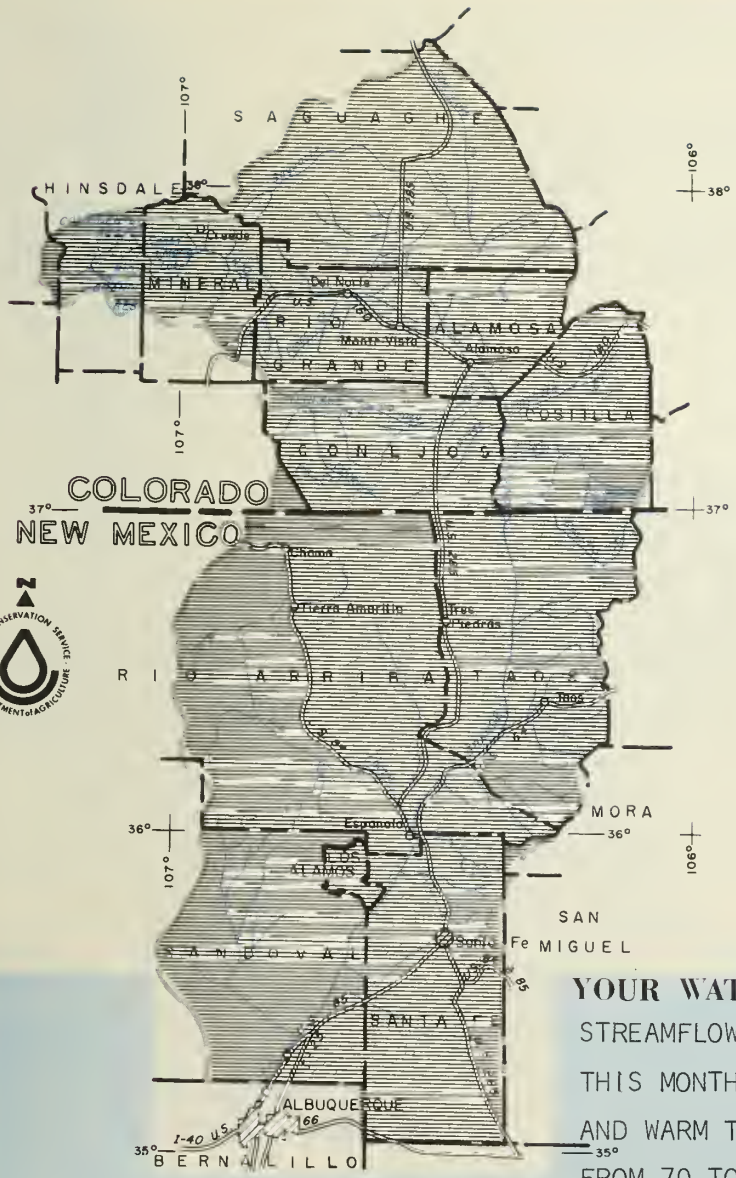

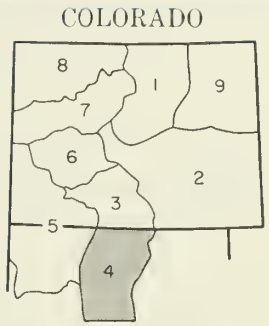

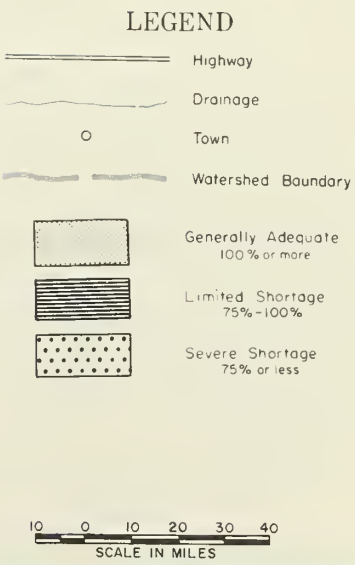

YOUR WATER SUPPLY

STREAMFLOW FORECASTS WERE LOWERED SLIGHTLY THIS MONTH BECAUSE OF LOW PRECIPITATION AND WARM TEMPERATURES. FORECASTS RANGE FROM 70 TO 90%. ABOVE AVERAGE PRECIPITA- IS NEEDED TO OBTAIN AVERAGE FLOWS. HOWEVER, RESERVOIR STORAGE IS EXCELLENT WITH SEVEN MAJOR RESERVOIRS CONTAINING 166% OF THE 1958-72 AVERAGE. OF THESE, ELEPHANT BUTTE CONTAINS 719,000 ACRE FEET COMPARED TO 385,000 ACRE FEET LAST YEAR.

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SANTA FE, NEW MEXICO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Mar-Jul

FORECAST POINT	FORE-CAST	% of Average	Average †
Costilla at Costilla(1)	15	79	19
Jemez River nr Jemez	23	79	29
Pecos at Pecos	38	93	41
Red River at Mouth nr Questa	24	83	29
Rio Chama at El Vado	152	80	190
Rio Gr. at Otowi (2)	400	76	526
Rio Gr. at San Mar (2)	220	62	355
Rio Hondo nr Valdez	10	71	14
Santa Cruz at Cundiyo	10	77	13

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Embudo Creek	Fair	Poor
Jemez River	Fair	Poor
Mora River	Avg.	Fair
Nambe Creek	Fair	Poor
Rio Ojo Caliante	Fair	Poor
Rio Pueblo de Taos	Fair	Poor
Santa Fe Creek	Fair	Fair

The forecast of the Rio Grande at San Marcial is __ % of the Average used by the Elephant Butte Irrigation District. (1) Observed flow plus change in Costillo Reservoir. (2) Observed flow plus change in storage in El Vodo and Abiquiu Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average †
Rio Grande	3	42	89

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average †

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
Alamorgordo	111	73	100	62
Caballo	344	78	72	83
Conchas	273	224	189	175
Elephant Butte	2195	719	385	380

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average †
El Vado	195	131	74	28
Heron	400	160	62	--
McMillen-Avalon	32	7	20	12

† 1958-1972 period.

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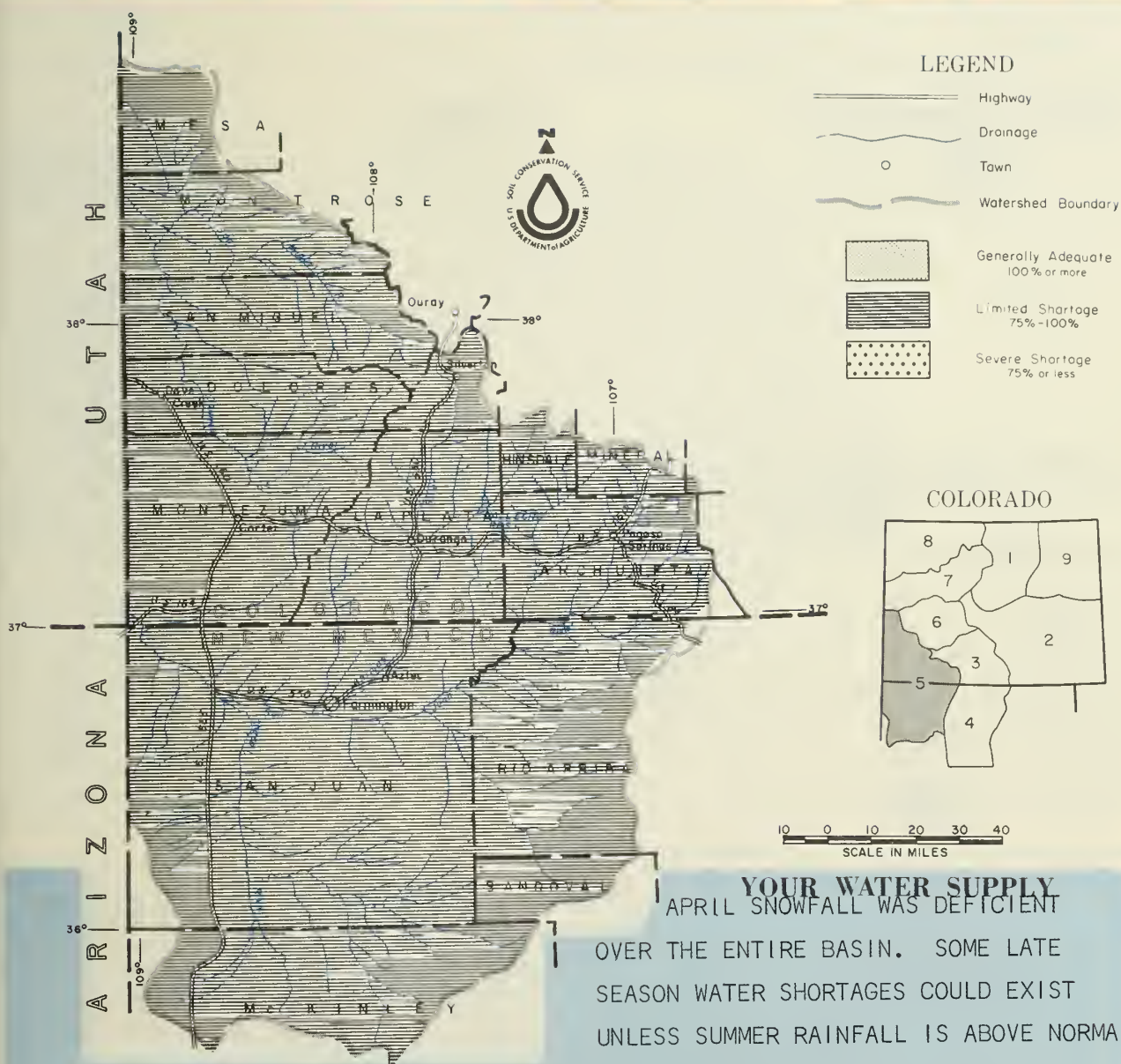
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN WATERSHEDS IN COLORADO AND NEW MEXICO

as of
MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

APRIL SNOWFALL WAS DEFICIENT OVER THE ENTIRE BASIN. SOME LATE SEASON WATER SHORTAGES COULD EXIST UNLESS SUMMER RAINFALL IS ABOVE NORMAL. STREAMS IN THIS BASIN SHOULD FLOW BETWEEN 70 AND 80% OF THE 15 YEAR AVERAGE. CARRY-OVER STORAGE IS SLIGHTLY ABOVE NORMAL. NAVAJO RESERVOIR IN NEW MEXICO CONTAINS 970,000 ACRE FEET -- A SLIGHT DROP FROM LAST YEAR AT THIS TIME. SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD.

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Animas at Durango	340	80	423
Dolores at Dolores	180	78	232
La Plata at Hesperus	17	71	24
Los Pinos at Bayfield(1)	155	78	198
Piedra Cr. at Arboles	150	81	185
San Juan at Carracas	290	82	354
San Miguel at Placerville	110	85	130
Inflow to Navajo Rs.(1) (Apr-Jul)	500	84	597

(1) Observed flow plus change in storage in Vallicito Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Florida	Fair	Fair
Mancos	Fair	Fair

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Animas	6	48	87
Dolores	4	48	115
San Juan	5	52	83

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Animas	3	74	66
Dolores	3	86	89
San Juan	3	74	66

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Groundhog	22	16	7	12
Lemon	40	19	16	25
Narraguinnep		16	16	--
Navajo	1696	970	1170	564
Vallecito	126	83	58	68
Jackson Gulch		7	--	7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
GUNNISON RIVER WATERSHED IN COLORADO

as of

MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

YOUR WATER SUPPLY

STREAMFLOW FORECASTS FOR THIS SEASON ARE NEAR AVERAGE RANGING FROM 92% TO 108%. FORECASTS WERE INCREASED FROM LAST MONTH'S WITH THE GUNNISON RIVER NEAR GRAND JUNCTION SHOWING THE LARGEST INCREASE. RESERVOIR STORAGE IN TAYLOR PARK IS 157% OF LAST YEAR AND 106% OF AVERAGE. BLUE MESA AND MORROW POINT ARE 311,000 ACRE FEET AND 114,000 ACRE FEET RESPECTIVELY, ABOUT THE SAME AS LAST YEAR. SOIL MOISTURE CONDITIONS IN IRRIGATED AREAS ARE REPORTED AS GOOD.

This report prepared by

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GLENWOOD SPRINGS, COLORADO

U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Gunnison inflow to Blue Mesa (1)	730	92	793
Gunnison nr Grand Junction (2)	1275	108	1184
N. Fork of Gunnison(3)	262	100	263
Surface Creek nr Cedaredge	15	94	16
Uncompahgre at Colona	130	97	134

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Taylor	Exc.	Avg.

(1) Observed flow plus change in storage in Taylor Reservoir. (2) Observed flow plus change in storage in Blue Mesa, Morrow Point and Taylor Reservoirs. (3) Observed flow plus change in storage in Paonia Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Gunnison	12	74	116
Surface Creek	3	70	103
Uncompahgre	3	65	105

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Gunnison	1	83	100
Surface Creek	1	74	85
Uncompahgre	2	79	93

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Blue Mesa	830	311	305	308
Morrow Point	121	114	115	115
Taylor	106	66	42	62

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +

+ 1958-1972 period.

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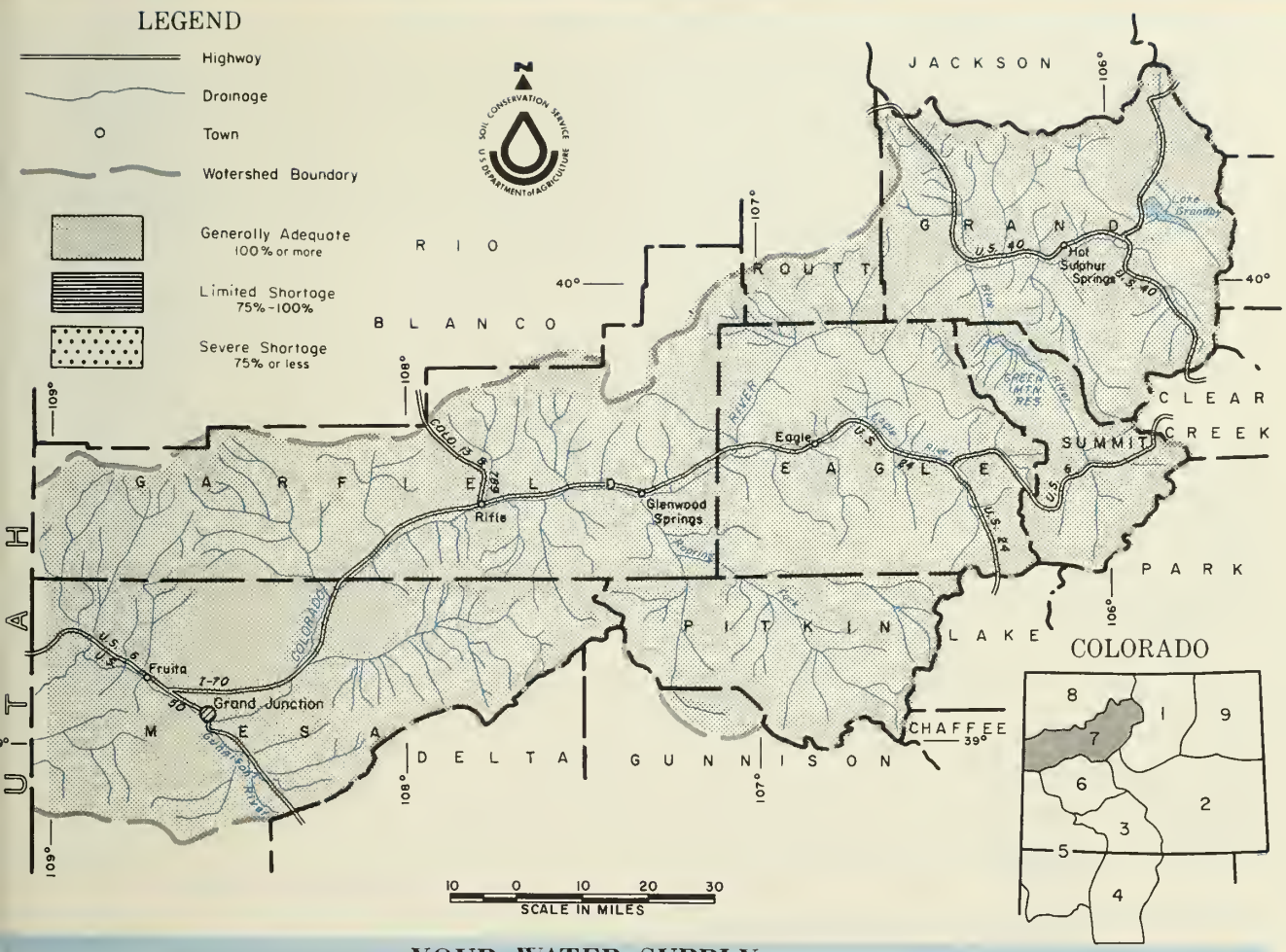
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
COLORADO RIVER WATERSHED IN COLORADO
as of
MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE BEEN INCREASED OVER LAST MONTH'S BECAUSE OF ABOVE AVERAGE SNOWFALL IN THE BASIN. WATER SUPPLIES SHOULD BE ADEQUATE WITH FORECASTS RANGING FROM 101 TO 128% OF 1958-72 AVERAGE. THE BLUE RIVER, WILLIAMS FORK AND FRASER RIVER BASINS ALL RECEIVED HEAVY SNOWFALLS DURING THE MONTH. RESERVOIR STORAGE IS NEAR LAST YEAR'S. SOIL MOISTURE CONDITIONS IN IRRIGATED AREAS ARE REPORTED AS GOOD.

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DENVER, COLORADO — GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Blue inflow to Dillon	200	118	169
Blue inflow to Green Mountain (1)	355	120	297
Colo. R. inflow to Granby Res. (2)	245	107	228
Colo. R. nr Dotsero(3)	1475	103	1434
Roaring Fork at Glenwood Springs (4)	725	102	713
Wm. Fk. nr Parshall(5)	80	127	63
Willow Cr. inflow to Willow Cr. Reservoir	60	128	47
Colorado nr Cameo (6)	2400	101	2370

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir. (2) Observed flow corrected for change in storage in Lake Gran as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch. (3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditc and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs. (4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plu cha in storage in Ruedi Reservoir. (5) Observed flow plus diversions through August P. Gumlick Tunnel. (6) Observed flow plus the changes as indicated in (3) and (2).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Blue River	8	128	133
Colorado	20	100	136
Plateau	3	72	102
Roaring Fork	7	79	112
Williams Fork	3	116	165
Willow	2	106	137

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Blue River	1	76	87
Colorado	5	91	89
Roaring Fork	1	101	101
Willow	1	102	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Dillon	254	239	219	229
Granby	466	368	307	209
Green Mountain	147	40	58	45
Homestake	43		18	11

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Ruedi	101	53	54	55
Vega	32	16	16	15
Williams Fork	97	46	56	29
Willow Creek	9	2	6	6

+ 1958-1972 period.

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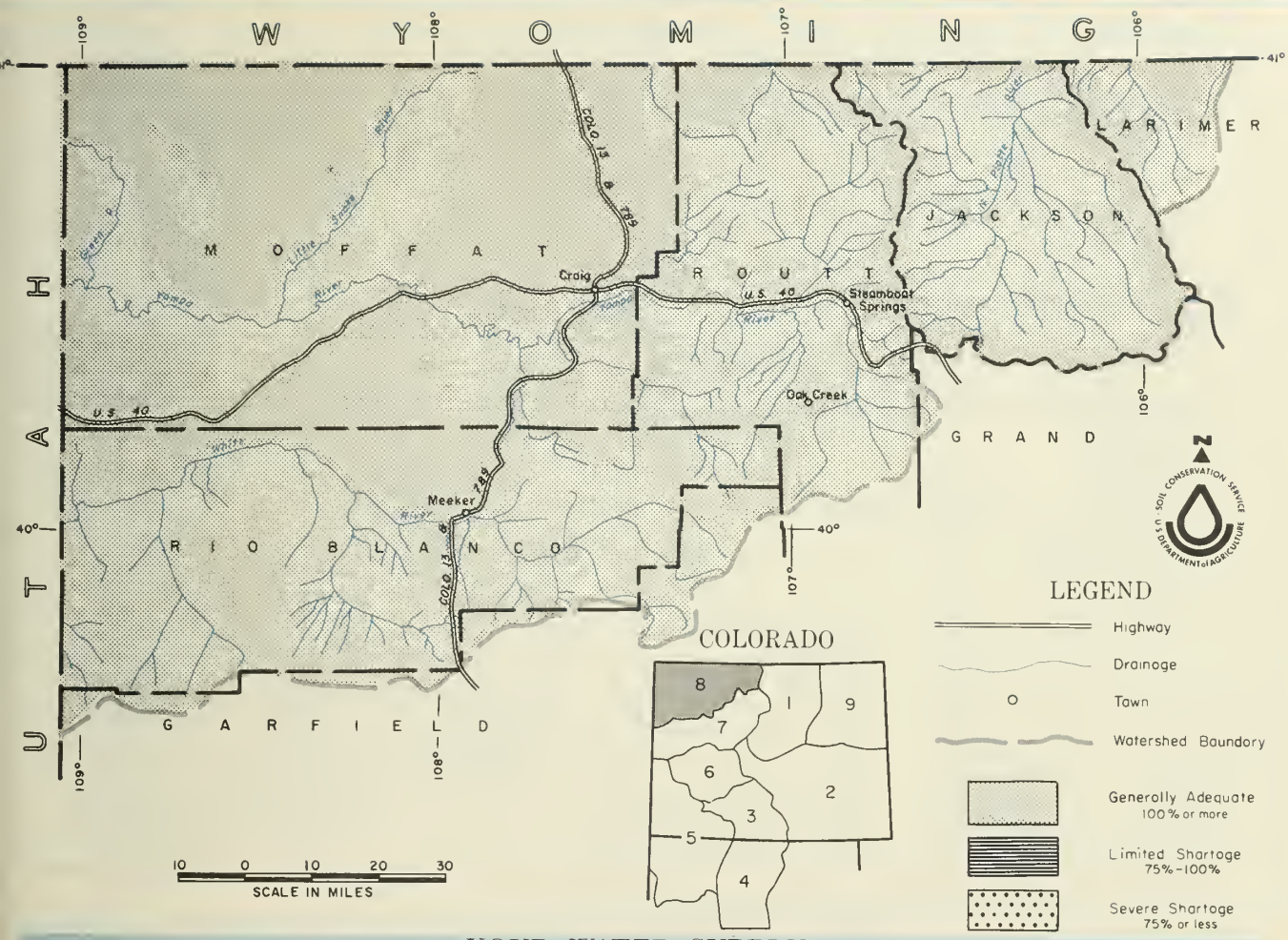
WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

as of
MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

SNOWFALL DURING MAY WAS MUCH ABOVE NORMAL ADDING TO THE ALREADY ABOVE NORMAL PACK. LOW ELEVATION SNOW IS NEAR OR AT RECORD HIGHS. HIGH ELEVATION SNOWPACK IS FROM 125 TO 150% OF NORMAL. SUMMER FLOWS OF 150% OF NORMAL ARE EXPECTED. SOME HIGH WATER COULD RESULT FROM THE LOW ELEVATION SNOWPACK IF TEMPERATURES ARE UNSEASONABLY WARM.

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GLENWOOD SPRINGS, COLORADO

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average †
Elk at Clark	250	126	198
Laramie nr Woods			127
Little Snake at Lily	500	154	324
N. Platte at Northgate			240
White nr Meeker	350	119	295
Yampa nr Maybell	1250	132	905
Yampa at Steamboat Springs	390	142	274

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
Canadian River	Exc.	Avg.
Hunt Creek	Exc.	Avg.
Illinois River	Exc.	Avg.
Michigan River	Exc.	Avg.
Oak Creek	Exc.	Avg.
Trout Creek	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF: Average †
Elk	2	119	147
Laramie	3	107	137
North Platte	5	101	124
White	2	121	168
Yampa	6	121	154

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average †
Laramie	2	120	90
North Platte	2	102	102
Yampa	1	99	126

† 1958-1972 period.

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WATER SUPPLY OUTLOOK
FOR THE SOIL CONSERVATION DISTRICTS IN THE
LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO

as of

MAY 1, 1974

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE

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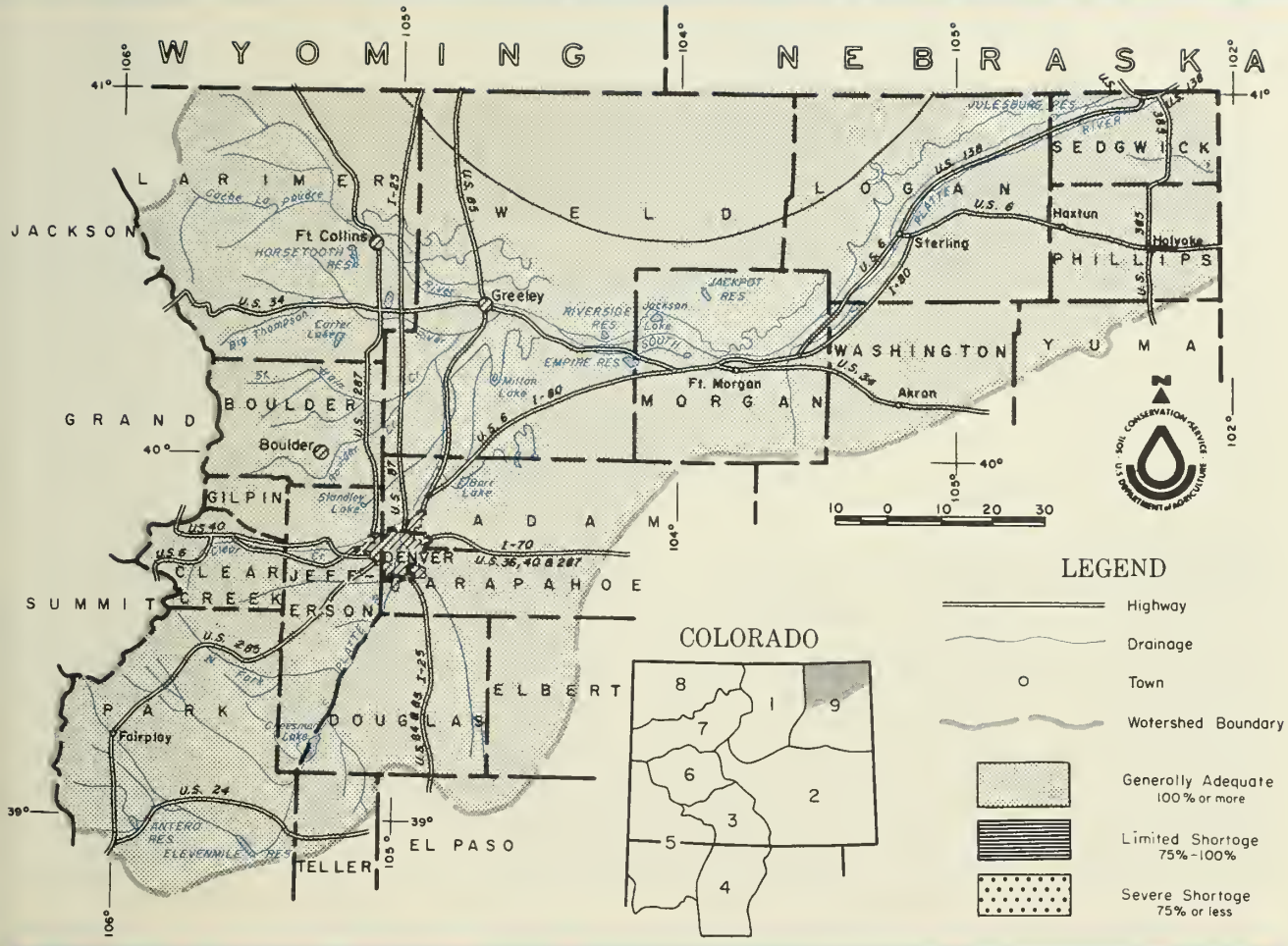

YOUR WATER SUPPLY

STREAMFLOW FORECASTS HAVE INCREASED FROM LAST MONTH BECAUSE OF THE HEAVY SNOWFALL IN THE HEADWATERS OF THE SOUTH PLATTE TRIBUTARIES. FORECASTS NOW RANGE FROM 100% ON ST. VRAIN TO 122% ON CLEAR CREEK. THE CACHE LA POUDRE AND CLEAR CREEK SHOW INCREASES OF 20,000 TO 28,000 ACRE FEET RESPECTIVELY FROM LAST MONTH'S FORECAST. RESERVOIR STORAGE IS ABOUT THE SAME AS LAST YEAR AND 186% OF THE 1958-72 AVERAGE. CARRY-OVER STORAGE OF THE DENVER SYSTEM IS 109% AND THE BIG THOMPSON PROJECT IS 140% OF AVERAGE. SOIL MOISTURE CONDITIONS IN THE IRRIGATED AREAS ARE REPORTED AS GOOD.

This report prepared by

JACK N WASHICHEK and RONALD E. MORELANO
SNOW SURVEY UNIT, SOIL CONSERVATION SERVICE
DENVER, COLORADO

Issued by

M. O. BUROICK---STATE CONSERVATIONIST
U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE
DENVER, COLORADO

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STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr-Sept

FORECAST POINT	FORE-CAST	% of Average	Average +
Big Thompson at Drake (1)	112	105	107
Boulder at Orodell	55	112	49
Cache La Poudre at Canyon Mouth (2)	265	107	247
Clear Creek at Golden (3)	155	122	127
St. Vrain at Lyons (4)	75	100	75

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period: Spring Season	Flow Period: Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

(1) Observed flow plus by-pass to power plants. (2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions. (3) Observed flow minus diversion through August P. Gumlick Tunnel. (4) Observed flow plus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF: Last Year	Average +
Big Thompson	4	102	107
Boulder	3	98	125
Cache La Poudre	8	84	127
Clear Creek	6	125	130
Saint Vrain	3	64	90
South Platte	3	86	93

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average +
Big Thompson	3	113	90
Boulder	1	63	72
Cache La Poudre	2	120	90
Clear Creek	2	97	93
Saint Vrain	3	113	90
South Platte	2	96	84

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Carter	108.9	107.0	107.0	98.5
Cheesman	79.0	67.5	56.5	60.2
Eleven Mile	97.8	94.5	91.7	89.1
Empire	37.7	34.7	34.0	33.1
Horsetooth	143.5	125.6	121.2	121.2

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage: This Year	Last Year	Average +
Jackson	35.4	34.4	34.7	33.3
Julesburg	28.2	22.8	23.1	22.5
Prewitt	32.8	28.1	28.6	23.3
Point of Rocks	70.0	71.5	70.6	66.2
Riverside	57.5	58.6	59.9	57.7

+ 1958-1972 period.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
NORTH PLATTE BASIN					
Laramie River					
Deadman Hill	4/26	62	23.2	20.9	18.0
McIntyre	4/28	38	13.5	13.9	10.1
Roach	4/27	70	27.2	25.0	18.5
North Platte River					
Cameron Pass	5/1	86	36.3	36.9	31.2
Columbine Lodge	4/30	60	27.4	21.0	22.0
Northgate	5/1	14	5.3	9.0	3.7
Park View	4/29	28	9.5	11.2	6.5
Willow Cr. Pass (B)	4/27	36	14.1	13.7	11.0
SOUTH PLATTE BASIN					
Boulder Creek					
Baltimore	4/29	31	8.1	10.0	3.9
Boulder Falls	4/27	42	15.5	15.9	13.1
University Camp	4/27	58	22.4	20.9	19.9
Big Thompson River					
Deer Ridge	4/30	5	1.9	6.5	2.7
Hidden Valley	4/30	31	9.4	---	11.6
Lake Irene (B)	4/28	66	25.8	23.1	22.9
Long's Peak	4/29	42	13.4	13.5	12.5
Two Mile	4/30	56	18.8	15.7	17.9
Cache La Poudre					
Bennett Creek	4/25	26	9.1	12.5	---
Big South	4/30	0	0.0	3.2	0.6
Cameron Pass	5/1	86	36.3	36.9	31.2
Chambers Lake	4/30	16	6.8	12.2	6.0
Deadman Hill	4/26	62	23.2	20.9	18.0
Hourglass Lake	4/25	34	11.2	11.3	6.0
Joe Wright	5/1	80	33.8	31.8	---
Lost Lake	4/30	35	12.5	12.2	9.9
Pine Creek	4/26	1	0.4	3.3	0.3
Red Feather	4/26	19	7.3	13.9	5.1
Clear Creek					
Baltimore	4/29	31	8.1	6.5	3.9
Berthoud Falls	4/29	53	16.8	16.9	12.4
Empire	4/29	40	11.9	9.5	6.9
Grizzly Peak (B)	4/25	69	26.0	16.5	20.1
Loveland Lift	4/26	68	23.3	20.8	24.0
Loveland Pass	4/26	59	21.9	15.7	15.0
Saint Vrain River					
Copeland Lake	4/30	4	1.4	6.1	2.4
Ward	4/30	20	4.8	10.3	5.6
Wild Basin	4/30	35	12.1	12.1	12.3
South Platte River					
Como	4/29	14	3.2	9.0	---
Geneva Park	4/29	7	1.1	3.9	1.9
Horseshoe Mountain	4/26	32	9.9	10.5	---
Hoosier Pass	4/29	40	13.0	11.2	12.9
Jefferson Creek	4/30	27	7.3	9.7	8.1
Mosquito	4/26	16	5.9	10.9	---
Trout Creek Pass	4/26	0	0.0	7.1	---
ARKANSAS BASIN					
Arkansas River					
Bigelow Divide	4/25	20	6.8	13.1	3.6
Cooper Hill (B)	5/3	47	15.5	11.0	12.1
East Fork	4/30	29	10.5	8.7	7.5
Four Mile Park	4/28	1	0.2	1.9	1.4
Fremont Pass	4/30	57	21.2	17.4	18.1
Garfield	4/29	25	10.9	17.8	8.6
Hermit Lake	4/25	9	3.9	10.4	---
Monarch Pass	4/29	46	18.9	20.6	16.3
Tennessee Pass	4/28	24	8.0	7.1	8.5
Twin Lake Tunnel	4/29	33	12.1	12.9	9.4
Westcliffe	4/25	0	0.0	6.2	1.6

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTEN (INCHES): LAST YEAR	PAST RECORD: WATER CONTEN (INCHES): AVG. 58-72
Cucharas River					
Cucharas Pass	4/29	0	0.0	17.4	3.3
La Veta Pass (B)	4/29	0	0.0	17.5	2.1
Purgatoire River					
Bourbon	4/29	1	0.4	9.2	2.5
RIO GRANDE BASIN-COLO					
Alamosa River					
Silver Lakes	4/29	0	0.0	9.0	0.7
Summitville	4/29	51	17.8	29.5	19.0
Conejos River					
Cumbres	4/28	23	12.4	29.8	13.7
LaManga	4/28	33	13.3	30.0	---
Platoro	4/29	18	7.6	19.8	10.5
River Springs	4/30	0	0.0	3.7	0.3
Culebra River					
Brown Cabin				8.2	---
Cottonwood (B)				---	---
Culebra	4/23	12	5.0	14.4	3.9
La Veta Pass (B)	4/29	0	0.0	17.5	2.1
Trinchera (B)				15.3	---
Rio Grande					
Cochetopa Pass	4/26	15	4.6	8.9	3.3
Grayback	4/29	34	12.9	21.2	---
Hiway	4/28	53	21.1	35.5	25.8
Lake Humphrey	4/25	2	0.5	8.4	0.9
Love Lake	4/30	0	0.0	13.3	---
Pass Creek	4/29	1	0.1	13.2	3.5
Pool Table	4/30	1	0.2	7.9	2.4
Porcupine	4/29	8	2.6	10.0	7.4
Santa Maria	4/29	0	0.0	4.4	0.8
Upper Rio Grande	4/29	2	0.8	12.7	2.2
Wolf Creek Pass	4/29	35	16.9	36.9	21.5
Wolf Cr. Summit(B)	4/29	66	26.9	44.9	30.4
SAN JUAN-DOLORES					
Animas River					
Cascade	4/30	3	1.2	17.5	4.2
Lemon	4/30	0	0.0	12.1	---
Mineral Creek	4/30	26	10.2	21.5	11.6
Molas Lake	4/30	17	6.9	14.9	7.8
Purgatory	4/30	33	11.7	33.1	---
Red Mt. Pass (B)	4/30	74	30.6	39.6	32.5
Silverton Sub-Sta.	4/30	0	0.0	10.5	0.3
Spud Mountain	4/30	45	18.7	35.8	21.7
Dolores River					
Lizard Head	4/29	43	18.9	22.8	14.9
Lone Cone	4/29	22	10.1	18.4	---
Rico	4/29	0	0.0	9.4	0.1
Telluride	4/28	0	0.0	9.9	1.4
Trout Lake	4/28	24	10.5	19.2	9.1
San Juan River					
Chama Divide (B)	4/30	0	0.0	0.0	0.0
Chamita (B)	4/30	0	0.0	0.0	0.2
Upper San Juan	4/29	44	20.1	42.2	25.0
Wolf Creek Pass(B)	4/29	35	16.9	36.9	21.5
Wolf Cr. Summit	4/29	66	26.9	44.9	30.4

NOTE: NS - No survey
(B) - On adjacent drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1974

SNOW COURSE	CURRENT INFORMATION: DATE OF SURVEY	CURRENT INFORMATION: SNOW DEPTH (INCHES)	CURRENT INFORMATION: WATER CONTENT (INCHES)	PAST RECORD: WATER CONTENT (INCHES): LAST YEAR	PAST RECORD: WATER CONTENT (INCHES): AVG. 58-72
GUNNISON BASIN					
Gunnison River					
Alexander Lake	4/29	55	23.5	31.2	21.9
Blue Mesa	4/29	9	3.3	6.6	1.7
Butte	4/29	39	15.2	14.2	---
Cochetopa Pass (B)	4/26	15	4.6	8.9	3.3
Crested Butte	4/29	22	11.2	12.8	7.0
Keystone	4/29	50	21.7	21.9	17.2
Lake City	4/25	17	5.7	8.0	4.2
Mesa Lakes (B)	4/29	44	17.8	28.9	15.8
McClure Pass	4/30	22	10.3	20.1	9.1
Park Cone	4/26	22	7.2	8.3	7.3
Park Reservoir	4/29	56	22.4	31.2	24.0
Porphyry Creek	4/29	49	20.0	22.5	16.5
Tomichi	4/29	31	13.2	16.5	10.3
Surface Creek					
Alexander Lake	4/29	55	23.5	31.2	21.9
Mesa Lakes (B)	4/29	44	17.8	28.9	15.8
Park Reservoir	4/29	56	22.4	31.2	24.0
Uncompahgre River					
Ironton Park	4/30	28	12.5	17.3	7.0
Red Mountain Pass	4/30	74	30.6	39.6	32.5
Telluride (B)	4/28	0	0.0	9.9	1.4
COLORADO BASIN (Main)					
Blue River					
Blue River	4/29	26	7.9	9.0	5.9
Fremont Pass	4/30	57	21.2	17.4	18.1
Frisco	4/25	21	7.1	8.0	4.7
Grizzly Peak	4/25	69	26.0	16.5	20.1
Hoosier Pass (B)	4/29	40	13.0	11.2	12.9
Shrine Pass	4/25	67	25.2	19.1	20.0
Snake River	4/25	31	10.5	5.3	3.3
Summit Ranch	4/30	23	8.3	6.9	4.9
Colorado River					
Arrow	4/30	48	18.4	15.0	11.1
Berthoud Pass	4/26	62	24.0	18.0	16.0
Berthoud Summit	4/29	81	27.5	21.7	21.1
Cooper Hill	5/3	47	15.5	11.0	12.1
Fiddler Gulch	4/30	45	15.9	13.6	14.5
Glenmar Ranch	4/29	22	8.6	10.0	4.4
Gore Pass	4/30	22	9.0	10.2	7.8
Grand Lake	4/28	22	7.9	8.3	4.0
Lake Irene	4/28	66	25.8	23.1	22.9
Lapland	4/25	39	13.9	10.4	7.3
Lulu	4/27	71	27.3	22.3	20.3
Lynx Pass	4/30	30	11.9	13.9	8.4
McKenzie Gulch	4/26	6	1.5	7.6	1.0
Middle Fork	4/29	28	10.3	10.4	6.2
Milner	4/28	40	14.3	11.9	13.1
North Inlet	4/30	13	6.1	8.9	6.3
Pando	4/30	27	10.2	11.2	8.0
Phantom Valley	4/28	23	8.1	9.8	7.0
Ranch Creek	4/30	45	15.9	12.3	9.4
Tennessee Pass (B)	4/28	24	8.0	7.1	8.5
Vail Pass	4/25	57	22.7	16.8	15.6
Vasquez	4/25	49	16.7	13.5	12.8
Roaring Fork River					
Aspen	4/28	60	24.7	21.0	17.7
Independence Pass	4/29	45	16.8	17.9	16.8
Ivanhoe	4/28	59	25.0	23.3	17.7
Kiln	4/29	42	17.0	12.9	---
Lift	4/28	45	17.0	22.2	19.0
McClure Pass	4/30	22	10.3	20.1	9.1
Nast	4/29	5	1.7	7.1	2.0
North Lost Trail	4/30	13	6.1	17.8	8.3
Williams Fork River					
Glenmar Ranch	4/29	22	8.6	10.0	4.4
Jones Pass	4/26	62	24.6	17.2	15.8
Middle Fork	4/29	28	10.3	10.4	6.2
Willow Creek					
Granby	4/29	16	6.5	5.7	4.0
Willow Creek Pass	4/29	36	14.1	13.7	11.0
Plateau Creek					
Mesa Lakes	4/29	44	17.8	28.9	15.8
Park Reservoir	4/29	56	22.4	31.2	24.0
Trickle Divide	4/29	66	27.6	34.3	26.9
YAMPA BASIN					
Elk River					
Elk River	4/26	51	21.9	17.4	15.4
Hahn's Peak	4/26	36	13.2	12.0	8.5
White River					
Burro Mountain	4/26	53	21.8	20.7	15.0
Rio Blanco	4/25	46	19.8	13.6	9.8
Yampa River					
Bear River	4/29	30	9.8	10.0	7.5
Buffalo Pass	4/25	141	61.6	46.3	---
Columbine (B)	4/30	60	27.4	21.0	22.0
Crosho	4/29	40	15.4	13.6	---
Dry Lake	4/25	67	28.7	21.9	16.9
Lynx Pass (B)	4/30	30	11.9	13.9	8.4
Rabbit Ears	4/30	97	41.6	30.9	27.1
Yampa View	4/30	46	20.9	18.4	9.3
RIO GRANDE BASIN - NM					
Rio Grande					
Chama Divide	4/30	0	0.0	0.0	0.0
Chamita	4/30	0	0.0	0.0	0.2
~~Cumbres~~ Pass	4/28	23	12.4	---	13.7
Hopewell	4/27	25	10.9	21.7	---
Rio En Medio	4/29	0	0.0	17.5	---

NOTE: NS - No survey
(B) - On adjacent drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1974

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
North Platte River					
Muddy Pass	4/30/74	11.1	9.7	8.5	8.5
Willow Pass	4/29/74	9.5	6.5	7.3	7.3
SOUTH PLATTE BASIN					
Boulder Creek					
Alpine Camp	4/30/74	6.9	3.3	5.2	4.6
Big Thompson River					
Beaver Dam	4/29/74	7.1	3.6	3.6	4.8
Guard Station	4/29/74	6.9	4.7	3.2	4.4
Two Mile	4/29/74	9.1	4.9	4.9	5.4
Clear Creek					
Clear Creek	4/25/74	9.5	5.8	5.8	6.1
Hoop Creek	4/26/74	4.9	2.7	3.0	3.0
Cache La Poudre River					
Feather	4/26/74	10.1	8.2	5.5	8.1
Laramie Road	4/30/74	12.4	6.9	7.1	8.7
South Platte River					
Hoosier Pass	4/29/74	7.8	4.6	4.4	5.3
Kenosha Pass	4/30/74	4.4	2.9	3.4	3.6
ARKANSAS BASIN					
Arkansas River					
Garfield	4/29/74	6.7	4.7	5.6	4.4
Leadville	4/30/74	7.8	4.8	4.1	4.6
Twin Lakes Tunnel	4/30/74	4.5	2.9	3.0	2.9
RIO GRANDE BASIN - COLORADO					
Conejos River					
Mogote	4/24/74	10.7	8.1	6.2	8.4
Rio Grande					
Bristol View	4/25/74	6.1	5.4	5.4	4.9
La Veta Pass	4/24/74	11.9	10.4	9.5	11.4
ANIMAS-SAN JUAN BASINS					
Animas River					
Cascade	4/30/74	9.1	5.3	6.2	7.0
Mineral Creek	4/30/74	5.7	3.0	3.0	4.1
Molas Lake	4/30/74	9.4	3.2	6.4	6.2
Dolores River					
Dolores	4/29/74	19.6	18.8	19.0	12.0
Lizard Head	4/29/74	11.8	3.4	2.6	7.0
Rico	4/29/74	13.8	3.5	8.4	9.8
GUNNISON BASIN					
Gunnison River					
King	4/29/74	3.3	2.4	2.9	2.4
COLORADO BASIN (MAINSTEM)					
Blue River					
Blue River	4/29/74	4.2	2.6	3.4	3.0
Colorado River					
Berthoud Pass	4/26/74	3.9	3.0	3.1	3.0
Gore	4/30/74	4.9	4.2	3.0	4.1
Grand Mesa	4/29/74	12.5	9.9	13.3	11.6
Ranch Creek	4/30/74	8.7	5.7	5.8	6.2
Vail	4/26/74	12.3	8.3	8.9	10.1
Roaring Fork River					
Placita	4/30/74	9.3	7.7	7.6	7.6
YAMPA BASIN					
Yampa River					
Hahn's Peak	4/26/74	19.0	12.2	12.3	9.7

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

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City of Greeley
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Colorado River Water Conservation District

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San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

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COLORADO STATE UNIVERSITY EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

MAY 15, JUNE 1, 1974
and
SPECIAL MEASUREMENTS

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Snow Surveyors near Ship Creek, Alaska snow course.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of stote and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevoda	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and tor British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

USDA-SCS-PORTLAND, OREG 1973

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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TABLE OF CONTENTS

WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS

WATERSHED I -SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Fort Callins, Big Thompson, Longmont, Boulder Valley, Jefferson, Teller-Park, Douglas County, Morgan, Kiowa, West Arapahoe, West Adams, East Adams, Platte Valley, Southeast Weld, and West Greeley Soil Conservation Districts.

WATERSHED II -ARKANSAS RIVER WATERSHED

Describes water supply conditions in Lake County, Upper Arkansas, Fremant, Custer County Divide, Fauntain Valley, Black Squirrel, Harse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Baone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca, Southeastern Baca, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, Kiowa County, West Otero, East Otero, and Big Sandy Soil Conservation Districts.

WATERSHED III -RIO GRANDE WATERSHED (COLORADO)

Describes water supply conditions in Rio Grande, Center, Conejos, Masca Hooper, Mt. Blanca, Sanchez, and Culebra Soil Conservation Districts.

WATERSHED IV -RIO GRANDE WATERSHED (NEW MEXICO)

Describes wa ter supply canditions in Upper Chama, East Rio Arriba, Taos, Lindrith, Jemez, Santa Fe - Pojoaque, Sandoval, Tijeras, Cuba, and Edgewood Sail Conservation Districts.

WATERSHED V -DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED

Describes water supply conditions in San Miguel Basin. Dave Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, San Miguel Basin, and Glade Park Soil Conservation Districts.

WATERSHED VI -GUNNISON RIVER WATERSHED

Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.

WATERSHED VII -COLORADO RIVER WATERSHED

Describes water supply conditians in DeBeque, Plateau Valley, Lawer Grand Valley, Boakcliff, Eagle County, Middle Park, Glade Park, Upper Grand Valley, South Side, and and Mt. Sopris Soil Conservation Districts.

WATERSHED VIII -YAMPA, WHITE AND NORTH PLATTE RIVERS WATERSHED

Describes water supply conditians in Yampa, Maffat, West Rautt, East Routt, North Park, White River, and Dauglas Creek Sail Canservatian Districts.

WATERSHED IX -LOWER SOUTH PLATTE RIVER WATERSHED

Describes water supply conditions in Sedgwick, South Platte, Haxton, Peetz, Padroni, Morgan, Rack Creek,and Yuma Soil Conservation Districts.

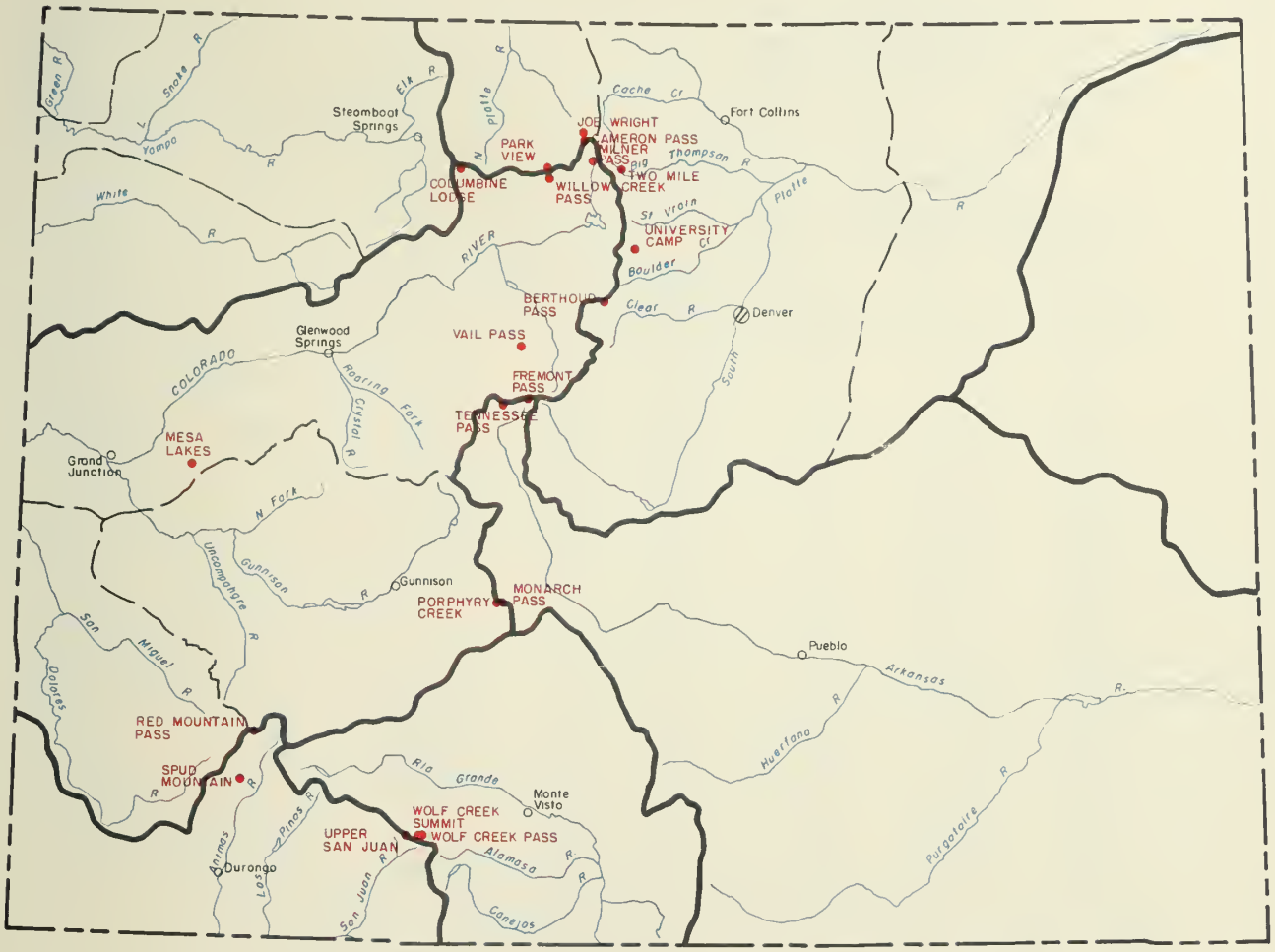
APPENDIX I -SNOW SURVEY MEASUREMENTS

APPENDIX II -SOIL MOISTURE MEASUREMENTS

COLORADO SNOW COURSE LOCATIONS

FOR

SPECIAL MEASUREMENTS



EARLY SEASON SNOW REPORT FOR COLORADO

January 1, 1974

Water Supply Outlook

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
P.O. Box 17107
Denver, Colorado 80217

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

	Current Information			Past Record Water Content in Inches		
Snow Course	Date of Survey	Snow Depth Inches	Water Content Inches	Jan. 1 1958-72 Average	Jan. 1 Last Year	Feb. 1 1958-72 Average
Berthoud Summit	12/28	36	7.7	7.8	8.5	11.4
Cameron Pass	12/19	36	11.0	---	---	16.5
Columbine Lodge	12/27	40	8.7	8.6	9.6	14.3
Fremont Pass	12/27	25	4.2	6.0	6.9	9.8
Joe Wright	12/19	35	9.8	---	12.0	---
Mesa Lakes	12/28	23	3.8	7.4	8.0	10.5
Porphyry Creek	12/28	36	6.0	7.1	10.9	10.0
Rabbit Ears	12/27	45	9.5	11.9	14.2	16.1
Red Mountain	1/02	49	11.5	13.6	20.7	19.0
Spud Mountain	1/02	37	6.9	10.5	15.4	15.2
Tennessee Pass	12/27	15	1.9	4.3	5.6	6.5
Two Mile	12/30	34	6.3	6.3	8.4	8.6
University Camp	12/29	42	8.5	6.8	7.3	10.9
Upper San Juan	12/28	33	7.6	14.2	20.9	19.1
Vail Pass	12/27	29	5.3	6.4	8.1	10.4
Wolf Creek Pass	12/28	28	6.4	13.5	19.2	17.4
Wolf Creek Summit	12/28	30	7.2	14.5	23.4	18.5

Only a limited number of snow courses are read as of January 1st. These only indicate trends. February 1st measurement schedule will provide extended coverage.

These measurements indicate the Front Range has near normal snow cover. The upper and middle Colorado River Drainage has just slightly below normal cover.

Grand Mesa snow is only about half of the 15-year normal.

The other area that is considerably below normal is the San Juan Drainage.

This is very early in the snow season and many changes can take place, however, carry-over storage is good and soil moisture conditions about average.

Spring flow prospects are at least normal.

May 15, 1974

WATER SUPPLY OUTLOOK

Federal-State-Private-Cooperative Snow Surveys

Snow Survey Unit
Soil Conservation Service
2490 West 26th Avenue
Denver, Colorado 80211

Report Prepared by
Jack N. Washichek and
Ronald E. Moreland
Soil Conservation Service

Snow Courses	Current Information			Past Record - Water Content (Inches)			
	Date of Survey	Snow Depth Inches	Water Content Inches	May 15 1958-72 Average	May 15 Last Year	May 1 1958-72 Average	May 1 This Year
Berthoud Summit	5/13	51	22.0	20.4	22.5	21.1	27.5
Cameron Pass	5/13	69	31.6	29.2	37.8	31.2	36.3
Columbine Lodge	5/14	27	12.2	13.2	14.5	22.0	27.4
Deadman Hill	NS	--	---	---	18.4	18.0	23.2
Fremont Pass	5/14	42	14.9	16.2	17.7	18.1	21.2
Joe Wright	5/13	68	28.8	---	32.0	29.5*	33.8
Mesa Lakes	5/13	10	3.8	9.0	23.3	15.8	17.8
Milner Pass				---	10.6	13.1	14.3
Park View	5/13	1	0.1	2.0	7.8	6.5	9.5
Porphyry Creek	5/15	20	9.7	13.0	20.6	16.5	20.0
Rabbit Ears	5/14	72	31.9	---	28.1	27.1	41.6
Red Mountain	5/14	50	24.8	27.8	40.5	32.5	30.6
Spud Mountain	5/14	26	11.6	17.9	32.5	21.7	18.7
Tennessee Pass	5/14	0	0.0	2.9*	8.2	8.5	8.0
Two Mile	5/16	42	16.0	17.8	18.6	17.9	18.8
University Camp	5/12	42	17.6	16.7	21.7	19.9	22.4
Upper San Juan	5/15	5	2.4	15.3	40.0	25.0	20.1
Vail Pass	5/15	25	10.9	10.6	13.4	15.6	22.7
Willow Creek Pass	5/13	7	2.6	5.9	12.3	11.0	14.1
Wolf Creek Pass	5/15	1	0.1	13.3	32.6	21.5	16.9
Wolf Creek Summit	5/15	46	20.3	29.0	45.0	30.4	26.9

*Less than 10 years of record.

Snowmelt has progressed smoothly over the state. Cool night time temperatures have slowed melt rates. No major flooding has occurred in the northern part of the state where a record snowpack exists. Much of the low elevation snow has disappeared. Some snow fell in the high mountains on May 13th and 14th. Forecasts remain about the same as May 1st.

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado State University Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

- Forest Service
- Soil Conservation Service

Department of Interior

- Bureau of Reclamation
- Geological Survey
- National Park Service
- Indian Service

Department of Commerce

- NOAA, National Weather Service

Defence Department

- Army Engineer Corps

Atomic Energy Commission

INVESTOR OWNED UTILITIES

Colorado Public Service Company
Public Service Company of New Mexico

MUNICIPALITIES

City of Denver
City of Boulder
City of Greeley
City of Fort Collins

WATER USERS ORGANIZATIONS

Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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